A STUDY OF THE NERVOUS AND MENTAL DISEASE CALLED HYSTERIA WITH SPECIAL REFERENCE

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TO

SYMPTOMATOLOGY, PATHOLOGY, AND TREATMENT.

BY

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A STUDY OF THE NERVOUS AND MENTAL DISEASE CALLED HYSTERIA WITH SPECIAL REFERENCE TO SYMPTOMATOLOGY, PATHOLOGY AND TREATMENT.

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The study of hysterical patients though full of difficulties and obscurities, is not altogether impossible to accomplish. Hysterical patients are easily managed, they talk willingly, and they are not dangerous patients to deal with as many other mental cases are. These patients readily lend themselves to observation and are always willing to be examined. The study of hysteria is very important as it is a singular malady, of which everybody speaks and which but few physicians know well. This disease is remarkable in its frequency, for it occurs in over 90 females out of 1000 females and only those who work hard escape it. Sydenham (1670) says "of "all common diseases, hysteria, unless I err, is the "commonest." It is very difficult to get statistics, for the physician is rarely consulted for the minor manifestations of the malady. It is an extremely common disease and frequently gives rise to mistakes in diagnosis. Thus, one can at once see that a therough study of hysteria is important and desirable from many standpoints, - Medical, Practical, Scientific and Philosophical.

This singular <u>mental</u> disease has played a very great and important part in the history of all religions and superstitions, and more so to this day it plays a most important part in most attractive <u>moral</u> questions. Great creeds have been spread by means of the emotion caused by astounding phenomena which have always been due to and associated with hysterical people.

These strange people (hysterics) raised such admiration and gave inspiration to the crowds by their natures and their mode of thought, their extracrdinary oblivions or resemblances and their visions. They saw or heard what others could not see or hear. These people had odd convictions, and they felt and thought in another way than the bulk of mankind. They had an extraordinary delicacy of certain senses and also had extraordinary insensibilities, so that they could perceive, appreciate, and see what others could not, and they could bear the most dreadful tortures with indifference and even with delight. These people could do without food or sleep for weeks or months, and they could, se to speak, de without these natural needs. Such hysterical subjects excited religious admiration of people whether as prophets, witches, saints of the Middle Ages, etc. They were admired and beatified

or burnt as heretics and witches. They played a great part in the development of religious and moral dogmas, castes and creeds.

All these phenomena, we now know, are the usual <u>symptoms of hysteria</u>. Is it not still true that if we want to throw some light on the mysteries of our destiny, to penetrate into unknown faculties of the human mind, we appeal <u>not</u> to an ordinary person in normal health but to a highly strung <u>neuropathic</u>, insensible to the things of the world but whose sensibilities are over excited and who is over enthusiastic in a certain direction. And in our <u>medical</u> terminology is this not a <u>typical hysterical</u> subject?

It was the fashion for a certain time to say that hysteria was a very rare disease for it had a <u>bad reputation</u> and a kind of <u>dishonour</u> attached to it. It was thought that hysteria was <u>frequent</u> only among <u>French</u> women but this is nonsense. Indeed French physicians were the pioneers to thoroughly appreciate this disease before others did. All civilised nations are the same - they have the same mind and the same body and the same miseries and destinies - so that why should only the French metion suffer from hysteria? If hystericals were supposed to be less numerous in other countries it is because

the physicians did not recognise them, and furthermore, even after diagnosis, they would not give it the proper appellation as, we have already remarked. hysteria had a bad reputation and a kind of dishoncur attached to it. Now the time has reached when medical men are more candid and their prejudices have vanished, and their pride and false patriotism have given way to scientific truth - so that we find hystericals all over the world. We must always remember (i) That hysterical diseases are very badly characterised from their physical point of view, (ii) That hysterical diseases are only well characterised from their mental and moral point of view, (iii) That hysterical diseases are uncommonly similar to many kinds of surgical and medical affections for which they are so often mistaken. Physicians have often been misled by phantom tumours of the stomach, the ovaries and the uterus and spurious haemoptysis. Diseases supposed to be situated in the viscera may simulate anything. Paralysis, contractures and anaesthesias due to hysteria may simulate many organic diseases and offer great difficulty in diagnosis. We cught to do homage to Charcot for having first called attention to these various hysterical phenomena which were too often wrongly, ignorantly, nay criminally dealt with by the surgeon or physician.

Historical sketch of the Evolution of "Hysteria."

The history began in the remotest antiquity. Democritus had his theory about hysteria. At first this theory was descriptive and anecdotical. It was, in one word, a period of curiosity and undue and uncritical admiration. It was the period of witches, sybils, period of surprising facts about somnambulisms, resurrection of lethargic (and even dead?) people, period of miraculous wounds and recovery therefrom, and period of extraordinary selfsacrifice and fastings. Then came the period which began only in the nineteenth century, when physicians sought to give this disease a position in medical science, to recognise its symptoms and distinguish it from other maladies. The next is the third period which we might justly call the "Psychological Period" in which period the mere classification and description of our ancestors was interpreted notably by French writers on a psychological basis. These physicians endeavoured to explain the innumerable phenomena of hysteria from a mental or psychological standpoint.

Last but not the least is the <u>anatomical</u> and <u>physiological</u> period in which a few modern pathologists and physiologists have endeavoured to explain the hysterical phenomena on a physiological or pathological basis.

The First Period.

It is sufficient to mention only the names of Plato, Hyppocrates, Calsus, who, in the middle ages described possessions, choreas, epidemics of tarentism. A little later we have one of the best descriptions in the seventeenth century by Lepcis. Later on Sydenham made known the "hysterical nail." "coughing," "vomiting," and "cedema." In 1758 Raulin was the first to maintain that there was "hysteria" among men; then Sauvage (1760), Astrue (1761), Witt (1767) and Pomme (1782) described and discussed this "strange problem." This period was disturbed by a dangerous conception which vitiated all studies about hysteria. Remember Plato's reverie in the Timoeus: - "The matrix is an animal which longs to "generate children. When it remains barren for a "long time after puberty, it finds it difficult to "bear, it feels wroth, it goes about the whole day, "closing the tissues from the air, stopping the res-"piration, putting the body into extreme dangers and "occasioning various diseases, until desire and love, "bringing man and woman together, make a fruit and "gather it from a tree."

Abdominal pains seated at the level of the ovaries, the movements of the hysterical nail, the suffocations of the patient during their fits originated all sorts of foolish ideas and played a great part in the interpretation of hysteria. As hysteria required an uterus, its existence was not admitted in men until serious discussions hore on the existence of masculine hysteria (Raulin 1758) and hysteria in young boys. The recognition of this disease in men and boys changed the conception of hysteria.

The Second or the Clinical Period.

This is the beginning of the nineteenth century. It is sufficient to mention the names of Georget (1821); Hufeland in Germany (1836); Brodie in England (1837); Brochet and Landouzy in France (1845), and Duchenne (1855). Brodie the English physician described the sensitive and motor disturbances in the articulations, and a hysterical accident is known after his name, "The knee of Brodie."

Then come Briquet (1859), followed by the most praiseworthy and most eminent representative of that period - J. M. Charcot, who gave precision and systematised our knowledge of hysteria. These duties distinguished between (i) The diagnosis of apoplexies, cerebral lesions, meningitis, cf hysterical mutisms, and fits of sleep. (ii) The distinction between hysterical and epipeptic fits. (iii) The distinction between hysterical gastralgias, dyspnoeas anorexies and the organic diseases which are apparent ly seated in the same viscera. (iv) The discovery and diagnosis of articular hysterical disturbances analogous to the Knee of Brodie. (v) The different motor accidents of hysteria. (vi) The paralysis and contractures of the limbs.

Although Charcot devoted his career to various discussions on the disease and apparently heterogenous symptoms of hysteria, and made researches on the traumatic neuroses, yet he had a greater embition. He felt that there is a greater necessity for the interpretation of these apparently mysterious and innumerable symptoms. He naturally sought to discover the general laws of hysteria. Lasegue had preached that "manifestations apparently the most "disorderly have not the individual character one "supposes, and they are not inexplicable exceptions." Charcot said: "Nothing is left to chance, on the "contrary all happens according to rules, always the "same, common to private and hospital practice, ap-"plicable to all countries, to all times, and to "all races." Charcot made some errors as he sought these general laws in the domain of physiology in contradistinction to M. Bernheim who has conclusively proved that this interpretation of the unity of hysterical phenomena is much more surely found in the domain of moral and mental phenomena. This controversy between Charcot and his School on the

one hand, and Bernheim and his School on the other brought about the period of psychological studies, -

The Third Period.

(The Study of psychological pathology).

Some doctors maintain that hysteria is a psychic disease and a disease of suggestion. It consists in disturbances which the patients persuade themselves that they have. It is a disease of persuasion. To describe this disease is no easy matter for the symptoms are numerous and diverse. This disease is not clearly defined and its limits are very vague indeed. We have nothing at our disposal to define the diseases of the mind - no anatomical lesion - no pathogenic germs and so on. If one wishes to describe a nervous disease, one must not fancy that it is possible to comprise in its description all possible subjects since there are always some indistinct phenomena, some contradictory symptoms, and aberrant causes. The group of symptoms we call hysteria though recognised and named for over 700 years has never got very much beyond its first stages. Its pathology is obscure and even after death no anatomical or histological lesions have ever been found. It cannot be reproduced in animals for experimental purposes. The only way to study is to have recourse to the "Inductive method of reasoning" based on clinical observations and chemical

data.

Terminology and General Definitions.

Bristowe defines hysteria as follows:- "Hys-"teria represents an unstable condition of the ner-"vous functions, arising independently of organic "changes in the nervous system, in which, at one time "or other, one or other part or several parts, of the "nervous organism may be temporarily affected in "various ways; but in regard to which, partly from "the conditions under which the symptoms of the dis-"ease arise, partly from the emotional state which "is generally present, and partly from the peculiar-"ities in the symptoms themselves, in their mutual "relations and in their course, there is, as a gener-"al rule. little difficulty in diagnosis."

Hysteria is defined by another author thus:-"A disorder chiefly of youngwomen in which emotional "states control the body, leading to perversion of "mental, sensory, motor and secretory functions."

<u>Savill</u> defines it thus:- "Hysteria is a complex "protean disorder chiefly affecting the female sex, "manifested by an immense variety of nervous, neuro-"muscular, neurovascular, sensory and other symptoms "which may be referable to almost any organ or part "of the body; symptoms which are often determined by "emotion, abrupt in their onset, reaching their maxi-"mum at once, paroxysmal in their course, and which "are apt to terminate suddenly and completely; symp-"toms which are disabling and distressing while they "last but never fatal; unaccompanied, as a rule, by "any very obvious physical signs during life, and "unaccompanied, as far as we can discover, by any "gross or microscopic anatomical changes."

The chief defect lies in the sympathetic system and particularly in the reflex centres of the neurovascular system. In olden times it was regarded as a disorder of the "humours" or "vapours" of the body; hence hysterical attacks came to be known as the "vapours" - a term which is still occasionally met with in certain parts of Great Britain. Then came its origin from some disorder of the womb. It was ascribed to the vague desires and wanderings of the womb. It was believed by Briquet to have an "emotional origin." Then the materialistic view of Charcot and his School came in vogue who maintained that there must be some functional, physiclogical, or dynamic change in the nervous system to account for so many paralyses, anaesthesias, and other hysterical manifestations. Charcot and his followers regard hysteria as a psychosis in which the morbid states were induced by ideas. The capacity of "responding to suggestion" is the test of its existence. It is a disturbance in the sphere of

personality in which the emotions have an exaggerated influence on the sensory, motor and secretory functions.

J. Mitchell Clarke says: - "In hysteria there is "a peculiar state of disturbance of the central ner-"vous system, affecting primarily and most profoundly "the highest cerebral centres, as is evidenced by "the mental and emotional characteristics that belong "to the disease, but most commonly or obvicusly be-"traying itself by some derangement of action of "lower cerebral centres. These disorders result "either from influences originating from within the "central nervous system itself or affecting it from "without, and are of such a nature that they give no "sign in any part of their course of the existence of "any organic change - that is to say, of any struc-"tural modification either of the nervous system as "a whole or of the part of it chiefly concerned in "any particular case."

Within the last twenty years or so arose the <u>psychological school</u> represented by P. Janet, Bernheim, Freud, etc. <u>Freud</u> defines hysteria as a "pure psychosis." <u>Pierre Janet</u> defines it:- "As "a form of mental depression characterised by the "retraction of the field of personal consciousness "and a tendency to the dissociation and emancipation "of the systems of ideas and functions that consti-"tute personality." J. Babinski defines hysteria as "a special psychic state which manifests itself "chiefly by troubles which can be called primary, and "occasionally be secondary or subordinate troubles. "The characteristic of the primary troubles is that "it is possible on the one hand to reproduce them with "exactitude by 'suggestion' in certain subjects, and "on the other hand to make them disappear under the "exclusive influence of suggestion." Thus the great French neurologist Babinski holds that hysteria is a mental condition with certain primary pehnomena and certain secondary accidental symptoms. The essence of the primary feature is that they may be produced by suggestion, and they may be made to disappear by persuasion (pithiatism). The primary features include such features as hemianaesthesia, paralysis, contractures, etc. The secondary features, as for example, muscular atrophy, are directly dependent on the primary and cannot themselves be induced by suggestion.

The Brener-Freud theory is in vogue now and we are reminded of the days of Aretaeus who originated the views of sexual hysteria, and believed that the womb "Like an animal within an animal." This erratic theory causes all sorts of troubles in

its wide wanderings. Jeliffe analyses Freud's view thus: - "There develop usually on a constitutional "basis, in the period before puberty, definite sexual "activities which are mostly of a perverse nature. "These activities do not as a rule lead to definite "neurosis up to the time of puberty, which in the "psychic sphere appears much earlier than in the "body, but sexual fantasy maintains a perverse con-"stellated direction by reason of the infantile sexual "activities. On constitutional grounds the increased "fantasy of the hysteric leads to the formation of "conflexes which are not taken up by the personality "and by reason of shame or disgust remain buried. "Thus therefore results a conflict between the char-"acteristic normal libido and the sexual repressions "of these buried infantile perversions. These con-"flicts give rise to the hysterical symptoms. It is " in his contributions to the sexual theory that Freud "develops his later thoughts of the sexual origin of "the hysterical reaction. By sexual it is important "to remember that Freud is not speaking of the sensual."

The significance of Frued's theory is the "tracing of every case to sexual traumata during early "childhood. Sexual experiences differ, however, from "ordinary experiences - the latter have a tendency to "fade out, while the idea of the former grows with "increasing sexual maturity. There results a dis-"proportionate capacity for increased reaction which "takes place in the suvconscious. This is the cause "of the mischief."

There must be, however, a connecting link between the infantile sexual traumata and the later manifestations. This connection Freud finds in the so called "hysterical fancies." These are the daydreams of erotic colouring, with gratifications, originating in privation and longing. These fancies hark back to the original traumatic moment, and, either originating in the subconscious or shortly becoming conscious are transformed into hysterical symptoms. They constitute a defence of the ego against the revival, as reminiscences, of the repressed traumatic experiences of childhood." (White)

Freud believes that hysteria has its origin in a painful reminiscence which is forgotten by the patient. Every painful repressed wish is converted into symbolic expression which may be either psychic or somatic. Furthermore Freud maintains that though the experience may have disappeared from the conscious memory, it is preserved in the subconscious mental life of the patient. Once the buried reminiscence has been restored to the consciousness the physical manifestation disappears.

THE ETIOLOGY OF HYSTERIA.

What is the essential cause of the hysterical diathesis one may ask? We may safely say that it is an <u>inborn</u>, <u>inherited predisposition</u> to develop the disease. Remember Professor J. M. Charcot's famous dictum, "once hysterical, always liable to Hysteria." The diathesis once firmly established can never be eradicated, but can be greatly modified by the mode of treatment, which we shall discuss later on.

It has been found that all the nervous centres (cerebral, medullary, spinal, sympathetic system) are unstable and unduly irritable in this disease. Shock or emotion can excite the centres; bloodchanges, exhaustion, mal-nutrition can make the various centres unstable and irritable.

THE ETIOLOGY OF HYSTERIA

The exciting	The	predisposing	The	determining
causes.		causes.		causes.

The Exciting causes of Hysterical Disorders :-

Any conditions lowering the bodily strength, mental strength, the emotional stability or the will power will bring about this disease. Prolonged grief and sorrow, infectious diseases and maladies, cachexias, severe bleedings, excessive physical strain, excessive mental work, sexual and venereal excesses, various toxaemias such as plumbism, mercurialism, alcoholism, syphilis, pregnancy, parturition and organic diseases are further conditions that tend to foster this diathesis. Remember the dictum of Guinon ("Les Agents provocateurs de l'Hystéria, Paris 1889). These conditions act as exciting causes only: "in a person predisposed by heredity and sex."

T. D. Savill was the first observer to show that <u>auto-toxaemia</u> may cause hysterical symptoms in one predisposed. Malnutrition often times fosters hysterical tendencies. Oral-sepsis, and sepsis of the intestinal canal (whether of the stomach, such as the various dyspepsias, chronic dilatation, etc., or of the intestine, such as the various chronic fermentative changes, mucous colitis, etc., etc.) are important conditions which bring about active hysterical manifestations.

It has been observed by modern workers that many auto-intoxications ("Lectures on Neurasthenia," by T. D. Savill, London 1908, 4th ed. p.136) such as chronic appendicitis, gastro-intestinal disorders, oral-sepsis, central disorders, incipient phthisis, may act as contributory causes of hysteria. Gastro-intestinal derangement acts not only as an auto-intoxication, but leads to malnutrition. There are a good few cases on record which prove that when once the oral sepsis (pyorrhoea alveolaris and gumboils) and the auto-intoxication of the alimentary canal (such as by the giving of intestinal disinfectants, correcting and toning up the bowel wall, correcting chronic constipation, etc., etc.) are well attended to, many hysterical manifestations disappear. The continued absorption of these septic products from the alimentary canal into the blood is a source of great aggravation of the nervous machinery.

It has long been maintained by many writers that celibacy and unsatisfied sexual desire are causes which favour hysterical manifestations in persons predisposed to the diathesis. Many observers argue that celibacy and sexual continence are potent causes both of the hysterical diathesis and of hysterical symptoms. Matrimony may lead to the temporary disappearance of certain hysterical symptoms, but one has always got to rëmember the strain (mental and physical) of child bearing and nursing. This theory is refuted by many authors who have shown that the incidence of hysterical phenomena are very nearly the same among married and unmarried females of the same age periods other conditions being equal. Many married women have hysteria quite as serious and grave as the spinsters. Briquet found that hysteria was not more common in those religious sisterhoods where the <u>law of celibacy</u> was followed, than amongst communities where celibacy was not observed. Briquet made exhaustive researches in this direction. He examined three large social classes:- (i) Religious sisterhoods, (ii) Domestic Servants, and (iii) Prostitutes, and came to the conclusion that "continence is not a cause of hysteria."

Faulty education and environment foster the hysterical diathesis, and promote the occurrence of hysterical manifestations. If a young woman has no interest in life beyond her own health, and if she is dependent upon emotional states, she is sure to bring about this diathesis.

It has been found by many workers on Hysteria that this malady is as common among the poor, the needy and the destitute as among the wage earners and the rich. T. D. Savill gives this table:-

(i) People in easy circumstances not obligedto work - 67 cases of Hysteria per 1,000.

(ii) People who are wage earners - 53 cases ofHysteria per 1,000.

(iii) People who are destitute - 60 cases of Hysteria per 1,000. It is most important to note that faulty education and an absence of any necessity to earn their daily bread may act as <u>exciting</u> factors. It is most difficult to determine the influence of "alcoholism" on the causation of the hysterical diathesis.

What are the important Educational Defects?

- (i) Excessive self-examination or introspection.
- (ii) A want of self-control over the emotions and passions.
- (iii) A want of education of the intellect, judgment, and, above all, self-reliance.

Let us attempt to summarise the exciting causes ("Agents provocateurs" of the French). <u>Emotion</u> holds the first place: fright, terror; grief, from the loss of a dear relative; disappointment, especially desertion by a lover, or the breaking off of an engagement, or the unexpected failure of a long cherished hope are other causes. The psychic impressions connected with such suppressed griefs or emotions form a group lying, so to speak, latent and outside the ordinary consciousness, and then apart from the patient's will or knowledge, may give rise to hysterical phenomena of various kinds. (See Studien über Hysterie, Von Dr J. Breuer and Dr S. Freud. Wein, 1895). The Predisposing Causes of Hysterical Disorders.

"Heredity" as a predisposing cause.

While all allow the influence of heredity, there is a considerable difference of opinion as to the part played by it. Some authors follow Charcot in considering heredity to be the only predisposing cause. It is not easy to accept this extreme view, as in many instances hysteria appears for the first time as the direct result of a definite cause, and in such cases we should be forced, in the absence of evidence, to assume an hereditary predisposition. Moreover, it can hardly be supposed that in epidemic outbreaks of hysteria, such as occasionally occurs in convents, schools, and similar institutions, that all the inmates are hereditarily prone to this disease. It has long been maintained that the hysterical temperament or predisposition is essentially something that is inherited and inherent in the individual. Without this "inheritance" both the exciting and the determining causes are, in all ordinary circumstances, unable to act. Heredity may come into operation in several ways. (i) There may be a direct inheritance of the hysterical diathesis. One or more of the children of an hysterical mother or grandmother, are almost certain to inherit the diathesis. The diathesis often skips

a generation on the father's side. (ii) There may be an indirect inheritance in the form of a "general neuropathy." This is very true when insanity, (epilepsy, convulsions, chorea, neurosis or other disorders) is present in the family history thus once more proving the intimate relationship between hysteria and mental disorder. (iii) Alcoholism in parents produces an undoubted neuropathic taint in the progeny. J. M. Charcot frequently referred to the powerful part which alcoholism plays in the production of general neuropathic or hysterical heredity. But Dr A. Reid argues, that the alcoholism in the parents is probably an evidence of nervous instability in them, and that it is this instability which is transmitted to the children. It is very difficult to ascertain facts concerning alcoholic family histories and heredity. Briquet made most exhaustive enquiry into the family histories of hysterical and non-hysterical mothers, and he said: "Infants, born of hysterical mothers, "present a much greater fatality and die at a much "younger age than those who are born of non-hysterical mothers." If Briquet's observations are correct, hysteria (being so largely an hereditary complaint) ought to die out from amongst us in the course of many generations. Inspecting ancient records

(Sydenham, "Nouvelle Iconographie de la Salpetriére;" Dr H. Meige; Charcot, "Les Demoniagues dans l'Art") we may say that our present cases of hysteria are neither so numerous, nor so severe, as they were in olden times. (iv) Amongst other toxaemias, at any rate in the poorer classes, a family history of tuberculosis is most often obtained.

The actual Determining Causes of Hysterical Dis-

orders.

These causes actually bring about or determine a paroxysm or attack of some hysterical manifestation (such as catalepsy, somnambulism, paralysis, convulsions, syncope, anaesthesia, etc). Almost all of these manifestations can be traced to some emotional disturbance or instability. Religious mania, anger, fear, joy, trauma, grief, fright may act in the same way, i.e., as actual and determining causes. Menstrual epoch has a potent influence on determining hysterical manifestations. Savill says: "The degree of emotional disturbance necessary to "produce an attack varies inversely with the degree "of the predisposition present in the patient." Charcot (in his cliniques 1888) records a case of a girl, aged 17 years, who had a cataleptic seizure even when the door slammed. In about 30% of

hysterical patients <u>pressure</u> on the inguinal region determined an hysterical seizure. Pressure on any one <u>Hysterogenic Zone</u> will determine an hysterical fit, seizure, or any other manifestation.

Three important Etiological factors.

- 1. The preference for the female sex.
 - The preference of certain age periods

 (About puberty and at the climacteric period).

3. The hereditary nature of the diathesis.

A study of the etiology of Hysteria leads one to the conclusion that: "It is an angioneurosis." The symptoms are mostly "Vasc-motor" in origin. HYSTERIA IN MEN AND IN CHILDREN.

Hysteria in Men.

<u>Raulin</u> (1758) who supported the opinion of Sydenham was one of the first to maintain that <u>there were</u> <u>hysteric men</u>. The chief points with regard to hysteria in men are that <u>hereditary</u> tendency is strongly marked, traumatism is, as would be expected from the nature of their occupations, far more common as a direct cause than in women. The disease in men is apt to take the "monosymptomatic" form and as a rule few of the general symptoms regarded as characteristic of hysteria (the stigmata of hysteria) are present. Cases in men are often particularly <u>obstinate of cure</u>, various forms of paralysis, spasm, and contracture are the commonest manifestations, and <u>sensory</u> disorders, though more often rare in men, if present, are <u>well</u> marked.

Hysteria in Children.

The diagnosis in a case of hysteria in children may be easy or present great difficulty. In hysteria there may be found, with a few exceptions, essentially the same <u>signs and symptoms</u> that occur in organic disease of the nervous system. The difficulty of distinction may be increased even when we attempt to grasp all the signs and symptoms in a given case of hysteria. Further, organic nervous disease is not infrequently complicated by the presence of hysteria.

In any case of dcubt it is better to wait and watch the patient for a while before coming to a definite decision. A little delay may clear up the problem. The main points in the distinction of hysterical affections from organic disease of the organs of special sense, of the thoracic or abdominal viscera, or of the joints, have been alluded to in the description of these disorders. Make the diagnosis on the ordinary principles of clinical examination. Decide the point whether the symptoms are due to hysteria or to organic disease or to both. Examine for those signs and symptoms which are clear evidences of organic disease of the nervous system, and then examine for the stigmata of hysteria (the affections of the sensation and of the special senses, the various paroxysmal manifestations, etc.) Remember that a negative result as regards these stignata does not certainly exclude the hysterical nature of some particular symptoms as

Although cases of hysteria in children have been described under the age of eighteen months, they are rare. It is occasionally seen at three or four years but its <u>chief incidence</u> falls from the age of <u>eight</u> upwards. With regard to <u>sex</u> there is <u>not</u> the predominance in the female that is seen in adult life. The sexes are about equally affected, if at all there is a slight excess of girls. The influence of <u>heredity</u>

these stigmata are often absent in some cases.

is marked as careful enquiry often reveals the presence of this nervous and mental disease in one of the parents or in near relatives. The importance of heredity being now admitted in hysteria, the earlier in life the disorder appears, the stronger should be its influence. Next to heredity in importance is alcoholism in the parents, as the influence of a drunken man shows itself in many ways. The influence of environment or home atmosphere in the causation of hysteria has already been noted and this diathesis is fostered in the infants of the rich as well as of the poor. The influence of imitation or unconscious mimicry in the etiology is often well exemplified in the case of children, and affords another example of the potent effect of their surroundings on the hysterically inclined. Thus a child with an epileptic relative may show hysterical convulsions, or become affected with hemiplegia or paraplegia. Epidemics of hysterical manifestation such as clonic spasms, or strange noises have often times been seen in schools.

<u>Traumatism</u> may play a very prominent part in childhood in exciting an attack of hysteria. A boy received a slight blow on the shoulder from a cane and a few days later developed complete paralysis of that arm. Charcot considered that <u>over-pressure</u> or <u>over-</u> <u>work</u> at school, produces hysteria in a <u>susceptible</u> <u>child</u>, and may act first directly by overwork, secondly, by fear of corporal punishment, and lastly through ill-treatment of a timid child by rough companions.

To the evil practice of <u>masturbation</u> some attach much importance in etiology. Take special care with neurotic children to prevent the formation of this unfortunate and disgusting habit.

Some characteristics of Hysterical children:-

They are often <u>precocious</u>, and very demonstrative in affection, but at the same time <u>fickle</u>, volatile, difficult to manage or control, liable to ourbreaks of <u>violent passion</u>, jealous of other children, spiteful, and <u>capricious</u> with regard to food. Remember that pronounced hysterical manifestations may occur in a <u>quiet</u>, morose child.

Hysterical children <u>sleep restlessly</u>, and are much given to talking in their sleep. Often one of the first symptoms to appear is <u>sleep-walking</u> or somnambulism. Hysteria in children often takes the "monosymptomatic form." Sensory disorders are not so frequent as in adults. . . pronounced anaesthesia and analgesia are very rare. <u>Hyperaesthesia</u> is much more common, and not infrequently accompanies various forms of paralysis or spasm. Localised spasm of muscles of limbs, various rhythmical movements, and coarse tremors are often seen. Paralysis especially paraplegia, is not uncommon in the hysteria of childhood, either of the flaccid type or attended with spasm. That form of <u>rare paralysis</u> (astasia-abasia) which we have discussed under the "Disorders of Motion" is not infrequent in children. Symptoms referable to the respiratory system, such as rapid respiration, various noises accompanying inspiration or expiration, loud barking cough, sudden <u>spasms of the</u> <u>diaphragm</u>, or hiccough, are all frequently present in the hysteria of childhood. Joint affections occur occasionally, especially in the <u>hip</u> and <u>spine</u>; in these cases there may be anaesthesia. Lastly children are occasionally in a state of <u>trance</u>, this being usually accompanied by fits of some kind. Hysterical fits are not at all common.

Hysterical pseudo-meningitis and pseudo-peritonitis.

Some symptoms such as intense headache, photophobia, dullness or drowsiness, localised tenderness of the head, constipation, vomiting, and general weakness with rarely definite loss of power in a limb or limbs may complicate the diagnosis, and the case may be regarded as one of meningitis. Furthermore pains in the stomach, extreme hyperaesthesia over the abdomen, vomiting, anorexia, and constipation with loss of flesh may suggest the beginning of <u>tuberculous peritonitis</u>, or if there is distension of the abdomen, of <u>typhoid fever</u>. If hysteria in children is kept in mind, and some little time taken to arrive at a correct diagnosis, then in many cases, the observer will come to an accurate conclusion.

The prognosis of hysteria in children is better than in adults. The symptoms rapidly disappear under suitable treatment but relapses are very frequent and may show other hysterical manifestations. DIAGRAMATIC REPRESENTATION OF THE "PATHOLOGY"

OF HYSTERICAL CEREBRAL ATTACKS.

- Fig.I. Indicates the normal balance of blood in the head and Splanchnic regions.
- Fig.II Represents the condition of "Hysterical Syncope." It indicates a state of dilatation of the Splanchnic area, associated with ischaemia of the brain and pallor of skin, when there is hypersecretion of urine due to Splanchnic congestion. Notice the "Solar plexus."

(After T.D.Savill).


THE PATHOLOGY OF THE STIGMATA OF HYSTERIA.

Hysterical girls suffer from an extremely common symptom - "fainting attacks" whose frequency depends to some extent on the presence or absence of a determining cause, such as an emotional disturbance, some fright, or pressure on the ovarian region, etc. The attacks are always more frequent and severe about the menstrual period, when they may last for an hour, at other times only for a few minutes. The face and limbs become pale (and possibly the rest of the body also including the nervous system), and then with a sigh she sinks back, rarely becoming unconscious, but simply unable to move. The mind is confused. After a short time the surface again becomes pink and she gradually resumes her normal condition. This process of recovery is often attended by "a rumbling" in the abdomen, and the passage of a large quantity of pale urine.

What are the Clinical Features of this Hysterical Syncope?

(i) A great majority of patients never have these attacks, but certain subjects are liable to suffer from them many times during their life time on the slightest provocation. There seems to be an inherent, innate or inherited quality in some part of the nervous or neurovascular system of these hysterical patients.

 (ii) The attacks are most common in the female.
 (iii) The determining cause is usually of an emotional kind, such as grief, fear, fright or shock, etc.

(iv) The <u>same causes</u> may produce "hot flushes" which are interchangeable with the "cold faints."

 (\mathbf{v}) Pallor of the surface lasting more or less during the attack, marks the initial stage. This <u>pallor</u> is most certainly due to vasomotor disturbances - a <u>constriction</u> of the surface vessels which may be primary, or compensatory to dilatation of the internal vessels (most probably due to the dilatation of the splanchnic area).

(vi) Copious secretion of pale watery urine,
which proves the dilatation of the splanchnic
vessels. The secretion of the watery constituents
of the urine, which largely depends on the bloodpressure in the glomeruli, may be increased by
(i) any increase in the general blood pressure, due
to increased force of the heart beat; to the constriction of the arterioles of the skin, or other
large vascular area; or (ii) to the relaxation of

(vii) These syncopal attacks are very often preceded by a curious, indefinable, but disagreeable sensation in the region of the stomach - a curious "throbbing", "sinking", or "relaxed feeling" in the abdomen.

Most of the features which have been detailed above, and which are common to a frequent and wellrecognised <u>hysterical symptom</u> are also those which in general terms are common to disorders universally recognised as <u>vasomotor</u> in origin. Consequently this brings the particular hysterical phenomenon (syncope or faints) and other hysterical manifestations into the <u>domain</u> of "vasomotor" disorders.

Ludwig and Dogral showed many years ago that the <u>rate</u> of the blood-flow in the carotid artery could be experimentally <u>accelerated</u> by mechanical <u>irritants</u> applied to the intestines.

<u>Leonard Hill</u> proved that the blood pressure in the <u>cerebral arteries</u> is very largely, if not entirely, regulated by the amount of blood in the <u>splanchnic area</u>, and vice versa.

We know that the vessels of the splanchnic area are capable of an enormous amount of expansion and contraction (they are capable of containing one third of the total amount of the blood in the body). Does it not follow that if the splanchnic area suddenly dilates, cerebral anaemia immediately results and vice versa. We know that "cerebral anaemia" is capable of producing both <u>syncope</u> and <u>convulsions</u>.

The inference from all the foregoing facts is that the essential cause of hysterical fainting consists of an instability of the reflex vasomotor centres in the sympathetic plexuses of the abdomen. These centres are more easily acted on than in normal persons, by slighter influences, such, for instance, as emotion. In the presence of a sudden emotion there is a rapid dilatation of the splanchnic arteries, a sudden rush of blood to the interior of the belly, with consequent cerebral anaemia, syncope, and the anaemic pallor of the skin. (See diagrams) The "epigastric aura" is the sensation arising from such splanchnic dilatation. In hysterical persons the instability of the reflex centres is very marked, is inherent, and therefore exists, throughout life, so that from time to time these centres are liable to be acted upon by slighter causes than those which act on the vasomotor centres of normal subjects.

There is another important symptom which merits our careful study, i.e., the "ovarian phenomenon," or "ovarian tenderness," or the "ovarie."

HYSTEROGENIC ZONES.

In some patients irritation of such tender areas produces a feeling of faintness, or vague, uncomfortable sensations. These fit-evoking zones are rare in this country.

> (De la Salpêtrière - quoted by Charcot in his "Leçons cliniques.")



Pressure on the inguinal regions (especially the left) produces in some patients a feeling of faintness, followed by a feeling of "sinking" in the stomach, then as a ball rising in the throat (globus hystericus) and finally a "fainting fit" (hysterical syncope). This "ovarian reflex" is believed to be more common in French patients than English patients. It exists in some of the male patients who are subjects of hysteria. Note that pressure on the testicle (the homologue of the ovary) will not produce the same results. The points, pressure upon which will produce the effects just described, are called in France "Hysteriogenic Zones," and though the inguinal region is by far the most frequent, the submammary region is another very common situation (one of my patients exhibits the phenomenon). In rare cases there may be many hysterogenic zones (Examine diagram). Rarely they may exist on the limbs (M. Gaube - "Researches sur les Zones hysterogenes" - 1882). It is most important to know the position of these zones or spots, for they are evidently the points when one can initiate, by pressure, centrpetal stimuli to some reflex centre. In some patients, pressure upon one of them will produce an attack, while pressure upon another will stop it. What does this mean?

Evidently we are dealing with a skin reflex as we shall see now. By far the commonest of the hysterogenic zones, both in the male and in the female, is the inguinal region - the region supplied by the ilio-hypogastric and by the ilio-inguinal nerves. These perves are entirely cutaneous or centripetal. It starts from the skin over the buttock and the skin in the inguinal region, and passing into the abdominal cavity joins the first lumbar nerve-trunk. where it is very intimately related with the solar plexus - the largest mass of the sympathetic nervous system. The ilio-hypogastric nerve is the centripetal depressor nerve of the abdominal sympathetic, and irritation of it by pressure in this region produces dilatation of the splanchnic area, and hence "cerebral anaemia."

These considerations explain many of the strange and apparently inconsistent features of syncopal and other hysterical attacks, if we look upon the solar plexus as the centre whence they start. We have thus examined how the vascular area (which is influenced by the sympathetic nervous system) is affected:- (i) By sudden emotion - the influence of this is initiated within the brain; (ii) By pressure on the ilio-hypogastric nerve; (iii) rarely, by pressure on other peripheral zones (hysterogenic spots); (iv) by irritation of the alimentary canal such as by flatulent distension of the stomach or the bowel; and (v) by other afferent tracts from the liver, kidney, etc., which influence this large and important vascular reservoir - the splanchnic area. There are a large number of phenomena attended by some degree of disturbance of <u>thought or consciousness</u>, and hence T. D. Savill calls these "hysterical cerebral attacks or storms." A great majority of them are attended by some generalised manifestation, such as fainting, motor weakness, convulsions, rigidity, etc. Savill has examined five hundred cases of hysteria and gives the following figures:-

- (i) Attacks of a syncopal or vertiginous type (360 or more out of 500)
- (ii) Attacks of crying and laughing which are extremely frequent.
- (iii) Attacks of generalised rigidity (173 out of 500 cases).
 - (iv) Hysterical convulsions and hystero-epilepsy(154 out of 500 cases).
 - (v) Attacks of collapse or prostration (54 out of 500 cases).
 - (vi) Vague sensations such as "rushes to the head", "bursting attacks," "throbbings" in the head, etc., are too numerous to mention.

The variety of hysterical attacks is truly endless .. Sometimes there is only confusion of thought or a dazed condition, sometimes there is loss of speech, sometimes the speech is excessive, sometimes the patient appears to be collapsed. silent, or in a half-waking dream, or screams, or there may be actual delirium or trance. In other cases motor or sensory symptoms predominate in the attack, such as falling down, prostration. convulsions, catalepsy, rigidity, numbness, blindness, deafness, hyperaesthesia, etc., etc. One important change in these attacks is the condition of the skin. Vascular alterations of some kind in the skin have always been associated with hysterical cerebral attacks. The pallor of the skin (noticed at the beginning of the attack) is sooner or later followed by slight redness, and this again might be succeeded by normal colour, or by pallor, the stages of red and white alternating with each other.

Savill was the first to observe these <u>skin</u> phenomena which led him to conclude that most of these hysterical cerebral attacks are vasomotor in origin. In one kind, which he calls <u>attacks of</u> <u>a syncopal type</u> there are (i) Pallor and "numbness" of the skin; (ii) fainting or other diminution of psychical functions; and (iii) diminution of power in the limbs. In the others, which he calls <u>con-</u> <u>gestive attacks</u>, there are (i) flushing of the skin with irritation; (ii) mental confusion, etc., (iii) restlessness, twitchings of the limbs, or even convulsions. In both kinds the attacks are transient and temporary.

What is the pathology of these apparently heterogeneous medley of symptoms? Remember that however much these attacks may seem to vary, they always bear the imprint of their cerebral origin. There is nearly always some disturbance of thought or some confusion of mind, however temporary and transient. These attacks are of sudden onset, run a varying or oscillatory course, if they last any time, and are apt to disappear suddenly and completely. It has often been observed that these attacks are attended by pallor or redness of the skin. These attacks are much more frequent in the female than in the male. These attacks are associated with evidences of an inherent predisposition in the individual to develop one or other of the various forms of attack met with in this group throughout life. These attacks are interchangeable and the same emotional causes which produce minor hysterical manifestations, in some produce major manifestations in others. These attacks are

determined by <u>emotion</u>, and not infrequently followed by a copious secretion of pale watery urine.

In view of all these facts Savill is of opinion that "hysterical cerebral attacks are due to a <u>vascular</u> change in the brain of <u>sudden onset</u> and transient duration. This change is of the nature of a slight congestion or an ischaemia. It passes off as suddenly as it came, and usually leaves no trace behind it.

Savill gives the <u>pathology</u> of hysterical cerebral attacks as follows:-

1. There exists in hysterical subjects, an <u>inherent</u> abnormal excitability of all the reflex <u>vasomotor</u> centres and particularly of those in the <u>solar plexus</u>, controlling the splanchnic vascular area.

2. Hysterical cerebral attacks are due to a <u>sudden dilatation of the splanchnic vascular area</u>, which results in "cerebral anaemia," "pallor of the skin," and hypersecretion of urine in varying proportions; or to a sudden constriction of the splanchnic area resulting in dilatation of the corresponding areas.

3. The splanchnic vasomotor centres in hysterical persons may be acted upon and an hysterical faint produced by <u>nerve</u> influences through several channels. The initial stimulus acting on the solar plexus may be started by nerve influences <u>initiated in the brain</u>, when some emotional µpset or shock is the cause. These centres may be acted upon <u>artificially</u> in some persons through iliohypogastric or ilio-inguinal nerves which pass close beside the solar plexus, when pressure on the "ovarian" region produces an attack, or they may be acted upon through other centripetal nerves when other hysterogenic zones are present. Finally they may be acted upon through the nerves of the intestine, when flatulent or other distension of the intestine or other intestinal or abdominal derangement is in operation.

4. From a study of the above facts, it is evident that not only <u>hysterical syncope</u>, but many <u>other</u> hysterical manifestations can be produced by these "cerebral attacks."

How can it be explained that one lesion (congestion or ischaemia of the brain) affecting the cerebrum account for <u>so many different kinds</u> of symptoms? How can we account for the <u>wide variations</u> in the severity, course, and duration? In answering these questions, remember two important facts, (i) the brain is the <u>latest developed</u> and <u>most delicate</u> organ, and it is most <u>susceptible</u> to slight nutritional or other changes which would not affect other organs in the same way; and (ii) that in a "cerebral attack" the lesion may vary considerably in its <u>severity</u>, in its <u>duration</u>, and in its <u>after</u> <u>effects</u> on the brain.

The <u>severity</u> and <u>duration</u> of hysterical cerebral attacks may be very considerable. In the majority of cases the attacks are <u>slight</u> and transitory and the patient completely recovers in a few minutes. In other cases the <u>resulting damage</u> to the brain is of a more <u>serious</u> and <u>lasting</u> nature, in some cases of hystero-epiplesy, and in some of the ensueing <u>motor disorders</u>. The suddenness, severity, and duration of the <u>vascular</u> changes in the braineither from <u>malnutrition</u> or other changes consequent on a sudden severe and prolonged ischaemia of the brain on the one hand, or the irritation and exudation from sudden hyperaemia, on the other, are well marked in some cases of hysterical paralyses, contractures, etc.

The wide variation in the <u>nature</u> of the symptoms no doubt depends partly upon the pressure and degree of cerebral ischaemia or congestion respectively, and upon the relative <u>suddenness</u> or <u>violence</u> with which these changes take place. Possibly it may depend on the <u>locality</u> in the brain which is the chief seat of <u>damage</u>. Attacks of "cerebral ischaemia" are of a <u>non-irritative</u> type, and result in syncope and collapse, whereas attacks of "cerebral congestion" are of an <u>irritative</u> nature, and result in twitchings, convulsions, and paralyses.

The other great alternative hypothesis is that these attacks are manifestations of a <u>psychosis</u>. They say that these attacks arise <u>solely in the mind</u> of the patients. The <u>mind</u> undoubtedly plays an <u>impor-</u> <u>tant</u> part as a predisposing condition, as a possible determining agent, and as an effect or manifestation.

In the first place an impulsiveness or want of mental balance (emotional instability) is part and parcel of the hysterical diathesis. It constitutes a predisposing condition. Secondly, grief, surprise, disappointment, etc., often of a slight degree, which would not act on non-hysterical patients, are capable of acting as exciting causes. This is particularly so in those common outbursts of laughter and tears. Savill maintains that the real centre affected is the solar plexus, and a mental (emotional) process is capable of acting as a peripheral stimulus of the splanchnic vasometer disturbances. Thirdly mental disturbance of some kind, is a symptom or effect common to all these hysterical cerebral attacks. These "vascular changes" act on the inherently unstable cerebral centres, motor, perceptive, and

intellectual. It is hardly conceivable, Savill says, that any <u>purely mental</u> condition should <u>alone</u> be capable of producing convulsions, and some of the other major symptoms of hysteria. He says that a purely psychical hypothesis is <u>not adequate</u> for the explanation and interpretation of the major manifestations of hysteria, but that the essential derangement of function is in the vasomotor centres.

What lead T. D. Savill to suspect the <u>vasomotor</u> <u>origin of hysteria</u>?

(i) By a comparison of the <u>essential symptoms</u> of hysteria on the one hand and those of well known vascmeter disorders on the other.

(ii) There is a striking similarity in the <u>course</u> and <u>prognosis</u> of these two groups of disorders neither being fatal, and both running a paroxysmal course.

(iii) The treatment of these disorders is the same, in general terms, by bromides, electricity and drugs which affect the general nutrition of the body.

(iv) The common <u>etiological</u> factor of these two groups of disorders is very striking indeed. In both there is the same predisposition to affect the <u>female</u> sex, the same tendency to run in <u>families</u>, to be determined by <u>emotion</u>, and to appear chiefly <u>when metabolism is defective</u>. Diagramatic representation of the pathology of hysterical cerebral attacks, "splanchnic storms".

- Fig. I Indicates the normal balance of blood.
- Fig. II Pepresents the condition in "Hysterical Syncope." It indicates a state of dila: :tion of the splanchnic area, associated with ischaemia of the brain and pallor of the skin.

(After T.D.Savill.)



(v) By explaining almost all the symptoms of hysteria on the "vasomotor" theory.

(vi) By a process of elimination or limitation of other hypotheses (The psychogenic hypothesis was shown to have its limitations).

Conclusions as regards the Pathology of Hysteria. Paroxysmal attacks of Hysteria.

(i) The reflex centre for the production of hysterical cerebral attacks is a vasomotor centre situated in the solar plexus.

(ii) This reflex centre is usually started by an emotional stimulus from the brain.

(iii) This reflex centre may also be started by pressure upon the groin (hysterogenic reflex through the ilio-hypogastric nerve) or by other peripheral stimuli.

(iv) Hysterical cerebral attacks are due to variations in the vascular condition of the splanchnic area.

(v) The vascular conditions within the abdomen, the skin, and the brain oscillate among themselves.

(vi) The morbid sensations and other effects produced in an attack depend upon whether the vascularity of the brain is increased or diminished.

Hysterical motor disorders.

These are due to vascular changes in the brain. The character of the resulting motor disorder depends upon the damage done to the cerebral structures and the extent, duration, and intensity of the vascular change in the brain.

Hysterical sensory changes.

Most of these sensory and other painful disorders are due to peripheral vascular changes or to <u>psychogenesis</u>.

Hysterical skin Symptoms.

These are due to the general vasomotor <u>instabil</u>ity which constitutes the main basis of hysteria.

Position of hysteria considered as a pure "psychosis"

(i) Hysterical persons throughout life present certain inherent peculiarities of mind - e.g., a tendency to mental <u>abstraction</u>, to mental <u>disso-</u> <u>ciation</u>, to auto-<u>hypnotism</u> and to <u>double personali-</u> <u>ties</u> - which render them more liable to exhibit abnormal mental phenomena.

(ii) A certain proportion of hysterical symptoms are <u>purely mental</u> symptoms.

(iii) The emotional side of the mind is strongly developed and emotional cutbursts are very frequent. These emotions exert a profound action on the vasomotor phenomena. (iv) The mind plays an important role in <u>ex</u>-<u>aggerating</u> symptoms which have but a slight physical basis.

(v) The mind also plays an important part in the <u>perpetuation</u> of symptoms after the physical basis has vanished.

Savill concludes by saying that "the Sympa-"thetic System, and more especially the vasomotor "apparatus, plays a much more important part in the "production of hysteria, and that a large proportion. "probably nine-tenths, of hysterical symptoms depend "in the main upon an instability of the vasomotor "centres throughout the body and a want of co-ordin-"ation among these centres. The resulting symptoms "depend upon the severity of the vascular changes and "their effects and the particular tissue or locality "of the body they involve. When the vascular altera-"tions occur in the central nervous system, convul-"sions, attacks of various kinds, paralysis, anaesthe-"sia, or other symptoms proper to the part involved "arise, but when the vascular alterations occur in "the viscera or around the periphery of the nerves "the symptoms are referred to these localities."

Briquet	LIST OF HYSTERICAL SYMPTOMS AND DISORDERS.	Savil	*
rer Instances centage recorded.	A. Hysterical Cerebral Attacks.	Instances recorded.	Per centage.
Very Common	Attacks of a syncopal and vertiginous type.	360	72.0
Very Common	Attacks of hysterics (crying and laughing).	Too numerou	s to re-
72.4 305	Attacks of generalised rigidity or trepidation.	cord. 173	34.6)
421	(Hysterical convulsions and hystero-epilepsy.	154	30.8 65.4
Frequent.	Attacks of collapse and prostration.	54	10.8
No data.	Attacks of "bursting," "rushes to the head" etc, and various other obscure sensations.	Very nur	nerous.
	B. Mental States.		
0.7 8	Catalepsy.	13	2.6
Rare	Ecstesy.	ଷ	0.4
Common with convul- sions rare alone.	Hysterical delirium and mania.	Γſ	5.2
* These percentages a little more	s are taken on approximately 500 cases; some of the some a little loss	recorded cases	were

Savill. Instances Per recorded. centage.	9 1.8	45 9•0		56 11.2	89 17.8	187 or more 37.4	264 52.8	hysterics rarely pass he night. Lethargy, 8;
List of Hysterical Symptoms and Disorders Contd. B. Mental States Contd.	* (Hysterical lethargy, trance, sleep, and somnam- bulism.	Loss of memory (partial or complete) dual con- sciousness and other partial derangements of intellect.	C. Hysterical Motor Disorders.	(Paralysis - hemiplegia, paraplegia, monoplegia, and various other forms.	Rigidity, contracture and tonic spasm.	Tremor.	D. Changes of Sensation. Hemianaesthesia; segmental anaesthesia of the ex- tremities; patches of anaesthesia; anaesthesia or hyperaesthesia of the special senses; phar- yngeal and laryngeal anaesthesia or hyperaesthe- sia; hysterogenic zones.	o figures of trance and somnambulism but states that ect calm; they have striking dreams or speak during
Briquet. Per Instances centage recorded.	3.5 <u>16</u> 400	No figures.		26•5 <u>120</u> 430	No figures.	No figures.	60 • 0 <u>240</u> 400	* Briquet records r the night in perf coma, 5; sleep, 3

Savill. Instances Per recorded. centage.			About 293 58.6			Very common	Fairly common	Very rare.	, derived from an 196 out of his 430
List of Hysterical Symptoms and Disorders Contd. D. Changes of Sensation Contd.	Hyperaesthesia generalised or localised.	E. Various Forms of Pain or Neural fig.	Rachialgia, submammary pain, coelialgia,* tri- geminal neuralgiae, brachialgia, pleurodynia, gastralgia, hysteralgia, enteralgia, nephral- gia, cephalalgia, and cystalgia.	Myalgia (muscular pain) and hyperaesthesia of the muscles.	F. Skin Symptoms other than Sensory Changes.	Attacks of pallor of the surface. Attacks of flushing.	Fugitive localised patches of congestion. Lo- calised ischaemia (chiefly of the extremities)	Haemorrhagic exudation.	riquet for painful sensations in the abdominal walls alled epigastralgia. Briquet found that no fewer th om this symptom (loc. cit., p. 236).
Briquet. Per Instances centage recorded.	$10.2 \qquad \frac{44}{430}$		Extremely common.	Extremely common.		Very frequent	No data.	Very rare.	* A term used by B. the belly; also c cases suffered fr

Instances Per recorded. centage	Frequent	Extremely. Frequent.	
List of Hysterical Symptoms and Disorders, Contd. G. Visceral attacks and symptoms referable to	the Alimentary Canal and other muccus channels. Hysterical cough; suffocation; spasm of the res- piratory passages; spasm of the digestive can- al; vomiting borborygmi; hiccough; palpita- tions; anginoid attacks; spasm of the genito-	urinary organs; spasm of the anus and vagina and tenesmus of the bladder and rectum. (Spasm of the pharynx and oesophagus (globus).	
Briquet. Per Instances centage recorded.	Frequent	92•5 <u>370</u> 400	

HYSTERICAL DISORDERS OF THE SPECIAL SENSES.

The Disorders of Sensation in Hysteria.

The most important extrinsic sign is the examination of sensibility, the modifications of which are of the greatest importance in hysteria. Hystericals do not know what is going on in their arms or legs, that they do not feel the fatigue of their protracted shakes and contractions, and that they may not even feel the movement of the affected leg or arm. In the middle ages people recognised witches by seeking on their bodies "the claw of the devil." Later on Sydenham (1651), Villarmay (1816), Georget (1824), Landonzy (1846), Briquet, and finally Charcot began to describe "the condition of sensation" in hysteria. Examine for this sensibility (i) on the skin, (ii) on the mucous membranes, (iii) in the muscles. It may extend on the skin or over the accessible muccus membranes of the natural orifices or it may bear upon the sensations of motion. Examine the skin and mucous membranes by contact (use your finger or a piece of paper): if not use the more accurate aesthesiometer. Examine the temperature sensations by applying cold and hot objects, and finally examine the sense of pain by sticking in a needle or by using algesimeters. Blindfold the patient and then examine the muscular sense, by placing the limbs different positions and asking the patient to in describe their positions and movements. In hysteric

paralysis, there is complete insensibility to position. The existence of such anaesthesias already gives you a great deal of information. Anaesthesia in organic affections is rarer, and in general, not nearly so deep as in hysteric affections. A great characteristic of hysterical anaesthesia is "the localisation or the place of this insensibility." In hysterical hemianaesthesia the anaesthesia just stops at the median line of the body, dividing into two equal parts the forehead, nose, mouth, breast and abdomen (See diagrams). This section is curiously regular: on the one side, the skin is absolutely insensible, as well as the mucous membranes and usually the organs of the special senses. The sensibility is intact on the other side and the subjects feel quite normally. This hemianaesthesia exists in some organic lesions and certain lesions of the internal capsule. This is rare and in general the separation is not so clear, that there is a broader line of demarcation, with confused sensibility. The troubles of sensibility are more severe in the extremities than at the root of the limbs. The anaesthesia may be of any shape or form. It may be irregular or segmental in character as we shall see more fully by and by. Remember that these various forms of anaesthesias by no means correspond to the distribution of the nerves

plexuses on this distribution of the insensibilities and on places of the reserved regions is founded the anatomic diagnosis of the lesions of the nerves, and of the tumours of the medulla. It is not possible to connect the forms of hysterical anaesthesias with the forms given by the organic lesions (See diagrams). Janet says "the hysteric patient, seems to attend to "the popular conception of the organ rather than to "its anatomic conception." These hysterical anaesthesias seem to have something mental or intellectual in them. Always keep in mind "the mental character" of the anaesthesia of hysteria. We are here dealing with subjective symptoms. We are dependent on the veracity as well as the intelligence of the patient. Time and patience are required for this examination. These hystericals are somehow or other liable to exaggerations. A great many disorders in this disease are vague - curious trophic changes as unilateral swelling and oedema of the hemiplegic side and ulcers of various sizes and shapes due to defective blood supply and trophic changes may be present in some cases. Metallotherapy, magnets, electromagnets, wood, galvanic, and static electricity, tuning forks, and other agents can cause the "transference" of anaesthesia from one side to the other.

DISORDERS of SENSATION in HYSTERIA.

Hemianaesthesia of left side : deeply shaded patches were hyperaesthetic. From a patient who three months before suffered from hysterical paraplegia.

(After J.M.Clarke.)



VARIOUS FORMS OF HYSTERICAL SENSATIONS

AND HYSTERICAL PAINS.

Sensitive and Sensorial changes: -

- (i) Hemianaesthesia.
- (ii) Segmental anaesthesia.
- (iii) Patches of anaesthesia.
 - (iv) Hyperaesthesia of the special senses.
 - (v) Generalised hyperaesthesia.
 - (vi) Pharyngeal and Broncholaryngeal hy-

peraesthesia.

(vii) Hysterical cough.

Pain and Neuralgiae

- (i) Submammary pain (commonest 50%).
- (ii) Rachialgia.
- (iii) Coelialgia.
 - (iv) Trigeminal neuralgia.
 - (v) Brachialgia.
 - (vi) Pleurodynia.
- (vii) Gastralgia.
- (viii) Hysteralgia.
 - (ix) Enteralgia.
 - (x) Nephralgia.
 - (xi) Myalgia.
 - (xii) Arthalgia.
- (xiii) Cephalalgia.
 - (xiv) Cystalgia.

DISORDERS OF SENSATION IN HYSTERIA.

Darkly shaded spots indicate patches of hyperaesthesia, the lightly shaded anaesthetic areas. From a patient with hysterical fits and muscular weakness.

(After J.M.Clarke.)



Strange and Indescribable sensations: -

- (i) "Deadness."
- (ii) "Numbness."
- (iii) "Fullness."
- (iv) "Tingling."

These sensations and hysterical disorders are mostly confined to the female sex. Their sudden and unexpected onset is only equalled in many instances by their sudden and unexplained disappearance or shifting of position. "They oscillate from hour to "hour and from day to day." They usually supervene on some emotional shock and date from a definite hysterical attack. These paroxysmal attacks are in some way related to the "Vasometer changes." Remember the great tendency to the exaggeration of these sensations by the patient and the large mental element in these hysterical sensory and painful disorders. The patient almost always uses the word "agony" and this is a great diagnostic feature of the hysterical diathesis. These disorders take the form of deficient, excessive, or perverted sensation.

HYSTERICAL DISORDERS OF SENSATION. Hyperaesthesia.

Hyperaesthesia of the skin and sense organs is fairly common in hysteria. Sometimes it may be recognised as hysterical by the sign described by A case in which nineteen hysterogenic zones existed, pressure upon or irritation of any of which would produce an hysterical attack.

> (de la Salpêtrière - quoted by Charcot in his "Leçon's cliniques".)



Benjamin Brodie, namely, that there is greater tenderness on <u>light</u>, <u>superficial</u> stroking than by deep pressure. One of the most frequent complaints is pain in the head, usually over the sagittal suture, less frequently in the occiput. This is the agonising pain called clavus hystericus. Patches of cutaneous tenderness or increased sensitiveness to pressure are common. Patients are aware of these tender patches which are called areas of hyperalgesia. The tenderness may be superficial or deep. The commonest situations for them are the infra-mammary, and ovarian region.

Hysterogenic Zones.

In some patients irritation of such tender areas produces a feeling of faintness or vague, uncomfortable sensations. Irritation of these hysterogenic Zones produces an hysterical fit. Such "fit evoking" Zones are, however, rare in this country.

Rarely cutaneous hyperaesthesia may be general over the whole body. Hysterical sensory disturbances may persist during long periods unchanged. Areas of anaesthesia and hyperaesthesia may get changed and modified in course of time, and be completely "transferred" to the sound side by suggestion, by electromagnets, metals, electricity, etc.

Hyperaesthetic areas and hysterogenic zones exist on the skin of the thorax and abdomen. Pressure HYSTERICAL DIATHESIS.

HYSTERICAL HEMIANAESTHESIA.

Equal divisions of forehead, nose, mouth, breast and abdomen. Anaesthesia stops just at the median line of the body.

After Pierre Janet.



or irritation of them may bring on minor hysterical manifestations, or more rarely may cause actual hysterical convulsions.

Anaesthesia:-

Anaesthesia is limited to one side of the body and face, to lower half of body, to a segment of a limb up to some joint. This anaesthesia is rarely limited to a distribution of a nerve. Touch, pain, temperature and muscle sense are all lost in varying degrees. Hysterical hemianaesthesia is the best marked type of hysterical disorder of sensation. It is often associated with hemiparesis. It may vary in intensity in different parts of the body. Typically hemianaesthesia is associated with anaesthesia of the special senses on the same side, including the mucous membranes. "This association is pathognomonic "in hysteria." Briquet found that hysterical hemianaesthesia was left sided in 85% of his cases. Pharyngeal anaesthesia is frequently present. Savill maintains that hysterical retention of urine is caused by anaesthesia of the bladder. The conjunctiva is often spared and there may be hemianopsia. The skin is pale and cool. Sudden appearance and disappearance of anaesthesia is common. Its transference to the other side under the influence of metallotherapy, hypnotism, etc., are well known.

DISORDERS OF SENSATION in HYSTERIA.

"Stocking" anaesthesia in paralysis (hysterical) of right leg. Plantar reflex absent.

(After J.M.Clarke.)



Rarely hysterical hemianaesthesia like the corresponding motor disorder may persist for months and years. One case is recorded by Savill which is of interest. The young woman had anaesthesia and analgesia of the left side - only the sense of hearing on that side remained normal. This condition on the left side lasted for nine years. The anaesthesia was subsequently improved by hypnotism. A few months later she was found to have anaesthesia of the right side with paresis in the right limb, the left side was then normal. These patients are ready to act to suggestion. Test all forms of sensation - Pain, Heat Cold, Touch, the muscular sense, the sense of position, and sense of movement. Remember that hysterical anaesthesia, unlike the anaesthesia due to organic diseases, has the great characteristic of causing little or no inconvenience to the patient. In the profound anaesthesia due to organic disease there are, as a rule, disagreeable subjective sensations, difficulty to perform ordinary actions, and the absence of accidental injuries. Janet has shown that in hysterical anaesthesia there is actually some sensation, so that the most common form of anaesthesia in hysteria is a moderate but not absolute loss of sensation to touch, pain, and temperature. In some proncunced cases, still quite common, there is
DISORDERS of SENSATION in HYSTEPIA.

Extensive anaesthesia of "segmental type" from a case of hysterical paraplegia.

(After J.M.Clarke.)



absolute loss of sensation in all respects - cutaneous anaesthesia may exist by itself or be associated with loss of the muscular sense, sense of position and sense of movement. Sensibility to faradism is lost in such deep and complete anaesthesias but it is preserved in superficial cutaneous anaesthesias. It is important to remember that the loss of sensation of pain is far more complete than the sensations of touch or heat. Always remember that hemianaesthesia is far more common in hysteria than in organic disease.

Segmental anaesthesia,

Is frequently associated with paralysis of the same parts. How can this be explained? This is due to vascular changes and their effects occupying one of the metameric segments of the spinal cord. Professor Brissaud (Nouvelles Inconographie de la Salpêtrière) has shown that the nutritional areas of the skin governed by the spinal roots are bounded by lines parallel to the long axis of the limbs, whereas the areas of the skin governed by the metameric segments of the spinal cord are disposed in bands at right angles to the long axis of the limb. This segmental anaesthesia involves all sensations - touch, pain, temperature and also the deep sensations of muscles, joints, and ligaments. Segmental anaesthesia HYSTERICAL DIATHESIS.

Hysterical anaesthesia - Various forms of localised patches of anaesthesia.

After Pierre Janet.



is met with only in hysteria. <u>Savill</u> maintains that all the sensory (segmental) and motor symptoms could be explained by <u>vascular changes</u> in the <u>cerebral cortex</u>. This segmental anaesthesia is abruptly demarcated by a true line passing round the limb at right angles to its long axis. It has been observed by French neurologists that this segmental distribution of anaesthesia corresponds to the <u>extent</u> of the limbs (arm, leg, thigh, or hand) and <u>not</u> to their anatomical boundaries. In exceptional cases the <u>special</u> <u>senses</u> may be lost or deficient on the <u>opposite side</u> to that of the superficial anaesthesia.

HYPERSENSITIVENESS TO CHANGES OF TEMPERATURE.

Is extremely common in hysterical subjects. It is believed to be due to <u>vasomotor instability</u> which exists in hysterical subjects. In this connection it is mainly the splanchnic vasomotor mechanism which regulates the balance of the blood in the interior and on the surface of the body. Hence the flushings and pallor that are so common in hysterical subjects. These patients are apt to feel the slightest draught, and an exaggerated sense of cold, sometimes with severe shivering or generalised tremors may cause. Fur thermore a moderately warm room will produce fainting due to sudden and <u>ill-regulated</u> dilatation of the skinvessels. These subjects may be spontaneously seized with a false sense of sold and a severe shivering fit. PATHOLOGY OF HYSTERICAL DISORDERS OF SENSATION.

- (i) Vascular changes in the brain.
- (ii) Peripheral vascular changes.
- (iii) Psychogenesis.

Vascular changes in the brain: -

There are cases on record, of hemianaesthesia associated with hemiparesis which closely resemble those due to embolism. The distribution of the symptoms is inexplicable unless some definite locality in the nervous system is involved. Always remember the unexpected and marvellous way in which they disappeared and reappeared. How can you explain these symptoms? Assume that in hysterical subjects there is a lesion in a definite locality in the nervous mechanism as in all organic cases, but with this great difference that the lesion in hysterical diathesis is glight and transient and temporary while the lesion in organic cases is profound and permanent. The following is a very remarkable case, admitted into the West End Hospital for diseases of the Nervous System (London) June 23, 1908.

<u>Symptoms</u> - Girl aged sixteen years, admitted for hemianaesthesia and tremor with slight stiffness of left side of body. This was diagnosed at first as a case of "Embolism of the sensory crossway," i.e., as an embolic lesion at the <u>posterior end</u> of the internal capsule (definite damage to the sensory and incomplete damage to the motor strands supplying the left half of the body). There was analgesia and anaesthesia involving the entire left side of trunk, face, and limbs; some retraction of the fields of vision more marked on the left. All the deep reflexes were increased especially on the left side. The tremors in the left arm and leg were small and vibratile, just as one finds in embolic lesions in the sensory crossway. Careful watching and cross examination revealed that the girl was a very "hysterical and excitable child." Contractures of the left foot and arm had appeared and disappeared many times ten years ago. Any excitement would bring on tremors and shaking. Rarely she had convulsive seizures accompanied by crying and followed by universal tremors. All her symptoms varied from day to day. The hemianaesthesia began to to disappear from the periphery towards the centre in a segmental fashion (see diagram). The treatment consisted of rest, good food, regular life, the faradic brush, static sparking over the spine, and Ergot internally. The patient was discharged with only one symptom, i.e., the retraction of the field of vision.

How can you explain all these symptoms?

We must assume that in hysteria there is a small,

<u>temporary</u> and transient lesion in the nervous mechanisms which bring about definite symptoms according to their mechanism involved. Where then are the <u>dif-</u> <u>ferences</u> between a true embolic or thrombolic lesion (organic) and a transient and functional lesion (hysterical). Remember how vasomotor actions vary in the skin and then assume that exactly the same happens in the brain.

<u>True Embolic or Throm</u>. <u>bolic lesion</u>.

True Embolic or Throm- Pseudoembolic (Hysterical)

lesion.

common.

- Definite and permanent

 Symptoms variable apsymptoms never fluc pear and disappear.
 tuate from day to day.
- 2. Faintings, cryings and 2. Attacks of crying, flushings never seen faintings and convulhere. sive seizures very
- 3. The attack comes on sud- 3. The attacks bring out denly with a single hemianaesthesia and faint or fall. tremor.

bolic lesion (Contd).

True Embolic or Throm - Pseudoembolic (Hysterical) lesion (Contd).

- 4. Embolism plays a pro- 4. Real embolism is never found part in bring- seen in hysteria. ing about true organic lesion.
- 5. It is a definite embo- 5. It is the vasomotor lus or thrombus which changes which produce the disorder. causes the lesion.

Peripheral vascular changes (Pathology).

Charcot maintains that in some cases the hemianaesthetic side is paler and colder than and does not bleed so readily, as, the opposite side. Savill suggests that the local vascular changes may be cause of some change in the peripheral sensory nerve-terminations. Remember that vasomotor instability is exceedingly common in mitral stenosis.

Case I. - Patient forty two years.

Subject of mitral stenosis and hysterical manifestations; complained of numbness, inability to write with the right hand, cold, pale hands - symptoms varied from day to day. Note the peripheral vascular changes.

Case showing the segmental or circular mode of disappearance of the anaesthesia.

(After T.D.Savill.)

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Case II. - Patient thirty six years.

Anaesthesia affecting left side and involving the special senses on the same side. Patient had the same attack while he was fifteen years old. The present attack caused disorder of the vision in addition to hemianaesthesia - the speech, tongue, cheeks, gung, being affected in addition to the vision. These attacks lasted from one hour to one hour and a half or sc - appeared and disappeared like magic. Furthermore he had "minor attacks" which lasted only for minutes. Careful examination revealed no organic disease either in the nervous system, or elsewhere. The deep reflexes were slightly exaggerated. The pulse, heart and blood pressure were normal. But it was cbserved that during the attacks "the left side was paler and colder than the right side." The blood pressure (135 mm.) was equal on both sides. It seems quite clear that the attacks consisted in the main of anaesthesia, and that they were usually attended "by pallor of the skin surface." These attacks were undoubtedly of a "hysterical nature." Main points: (i) The sudden conset of symptoms after an emotional disturbance. (ii) The curious and characteristic distribution of the anaesthesia. (iii) The anaesthesia is sensitive and sensorial.

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(iv) The anaesthesia rapidly reaches its maximum and rapidly disappears.

Pathology of the attacks:-

According to Savill they are the result of a **local** vasomotor change in the parts affected, due to some inherent stability in the vasomotor centres on that side. The resulting <u>local vascular constriction</u> leads to the <u>temporary functional inactivity</u> of the sensory nerves - arm, leg, and special senses. It is just possible that vasomotor or vascular changes in the brain might have produced the severe and complete attacks attended by hemianaesthesia and also the local vascular changes.

Psychogenesis.

There are some fundamental qualities which lend themselves to the production of sensory disorders. These are:-

- (i) <u>Unstable centres</u> All the centres of the hysterical patients are unstable. These centres and special senses get much more tired in hysteria than in other disorders. In these patients some of the "perceptive centres" in the brain pass into a state of lethargy (abeyance) or of irritability. By reason of certain "mental peculiarities" the patient may be <u>cver-conscious</u> or <u>under-conscious</u> of certain sensory and sensorial stimuli.
- (ii) <u>Tendency to abstraction</u>, <u>autohypnotism</u>, <u>day</u>-<u>dreaming</u>, and <u>somnambulisms</u> are common in

such subjects. Their attention cannot be fixed when for some reason their nervous system is below par when their whole consciousness is absorbed in another direction or precoupied these patients "feel no pain," and do not respond to natural stimuli.

(iii) Limitation of the field of consciousness -Psychology has taught us that in these patients especially during an outbreak of some hysterical disorder, there is a depression or exhaustion of the higher functions of the encephalon. Professor Janet, Professor of Psychology in the Collège de France defines hysteria as "a form of mental depression "characterised by the retraction of the field "of personal consciousness - and - a tendency "to the dissociation and emancipation of the "systems of ideas and functions that consti-"tute personality." This definition tells us (i) that there is mental dissociation and a tendency to abstraction in this disease, and (ii) that there is a limitation of the field of consciousness.

The theory of mental "Dissociation" :-

This theory is accepted by many able psychologists. This theory "involves the postulation of "existants that are radically incapable of being ob-"served directly or indirectly by any man."

When the dissociation of sensation occurs the loss may affect one form of sensation only. Loss to pain (analgesia) is most common, but tactile anaesthesia may be found with normal acuteness to pain or there may be peculiar dissociation, such as loss to sensations of pain and cold whilst those of touch and heat are retained. Rarely the peculiar dissociation of sensation seen in syringomyelia (loss to temperature and pain but not to touch) has been described.

These are vague and elusory hysterical symptoms we have to deal with. The <u>central effects</u> are manifest only to the mind and consciousness of the patient, and we are dependent on the intelligence, veracity and ability of our patients. These are unlike motor disorders which the doctor can see, feel, examine, and estimate for himself. Obvicusly then we are dealing with a class of phenomenon in the production of which themental processes and mental state of the patient play an important role.

The theory of limitation of the field of consciousness

Study the concentric field of retraction of the field of vision in such patients. Although their field of vision is reduced, even to a mere pin point, some of these patients can play at ball, and can avoid obstacles that a glaucomatose patient with similarly contracted fields cannot do. M. Janet holds the view that such patients can see with their "subconscious" mind over a larger area than with their "conscious" mind, and that this diminution of the field of vision is really due to retraction of their field of consciousness. Savill suggests that the capacity to avoid obstacles presented by hystericals might be due to the "superior alertness of their ocular mus-"cles, an alertness not found in glaucomatous patients."

HYSTERICAL PAINS.

"These pains are not of local but of central "origin and may be classed as hallucinations of pain, "i.e., as direct excitation of the pain perceptive "centres, though they are often due to slight peri-"pheral stimulation" (Professor Oppenheim).

The pains and neuralgiae are manifold and varicus. These pains are the same in non-hysterical patients, except (i) There is great exaggeration patients speak of it as "agony." (ii) Some localities are more affected than others. (iii) They occur under certain circumstances and associated with other hysterical symptoms. The pain usually presents Brodie's Sign, i.e., greater tenderness to superficial stroking than to deep pressure. The pain is paroxysmal and varies from day to day or minute to minute. Like other pains it is relieved by attracting attention into other channels.

Localities: No organ or locality seems to be exempt but there are three favourite places:-

- (i) Under the left mamma. This is the commonest situation. It occurs in about 50% cases. There is generally undue sensitiveness and a hysterogenic Zone may be found in this position.
- (ii) Abdomen next commonest site (Briquet gives 196 out of 430; Savill 174 out of 500 cases.)
- (iii) <u>Clavus</u> pain and tenderness at one spot on the scalp, associated with vertigo, nausea and vomiting. Hemicrania is regarded by many authors as the most common form of pain.
 - (iv) Pain and acute tenderness along the spine (rachialgia).
 - (v) Pain in joints (arthalgiae).
 - (vi) Pain and "sense of weight" in the internal organs.

Pathology.

Most difficult, as no lesion has yet been found if we except redness and pallor sometimes observed at the site of the pain.

Causes of Hysterical pain :-

 Psychogenic factor - When speaking of pain a patient really expresses a ratio between a causal peripheral stimulus and the susceptibility of the perceptive centres to pain in the brain at that moment. This pain is unduly exaggerated in hysterical people. Even a very slight causal agency - an undue vascularity of a part will produce a most severe pain in hystericals.

The C.N.S. may be unduly irritated by some toxin circulating in the blood, the chemical nature of which we do not know. By concentrating the attention away from a "pain" the latter may be diminished, just as soldiers wounded in battle may feel no pain during the excitement. Can we not conceive the converse that by concentrating the attention upon a part a percept of pain may be <u>created</u> in the mind?

(ii) <u>Reflex causes of pain</u> - Pains may be reflected from internal organs due to slight derangements or disturbances. We pointed out that pain under the left mamma was the commonest site of pain in hysteria. Thus pain in the left intercostal region represents the area of reflected cardiac pain and that palpitation, a rapid pulse and cardiac irritability may bring about this pain. Pain in the abdomen might be "reflected pain." Briquet Dejerine - Traité de Pathologie Genérale.

terior Surface - Peripheral nerves & their cutaneous distribution.

sterior Surface - Peripheral nerves & their cutaneous distribution.

After Pierre Janet.



pointed out this long ago. This is due to "vascular changes in the splenchnic area" the "splenchnic storms" of Savill. This is due to hyperexcitability of the reflex centres in the solar plexes.

Local irritation at the periphery or along (iii) the course of a sensory nerve. This is Sufficient to "initiate the perception of pain" in the hypersensitive cerebrum of hysterical patients. Many careful physicians state that hysterical pains "are often due to slight "peripheral irritation or stimulation." Oppenheim states, "There is also a hysteric form "of breast pain, its seat being in the mam-"mae (mastodynia)." It may be very stubborn and may be combined with hyperaesthesia of the skin, reddening, cedema, general and circumscribed swelling of the mammary glands and even with ulceration of the skin. This disease, described by Charcot and Filles de la Tourette as "sein hysterique," has, as has also simple mastedynia, given cause for amputation of the mammary gland.

Hysterical neuralgiae -

Be careful to distinguish between tenderness of the skin, which is common in hysteria, from tenderness of a nerve trunk which is more common in neuritis, than in hysteria. Neuralgiae may be due to (i) Reflex causes. (ii) The involvement of sensory nerve endings. (iii) The mental condition. (iv) In some cases there is an irritative vascular change in some sensory area of the brain, the pain being naturally referred to the nerve ending.

<u>Conclusions</u>:- (i) Admit the potency of the psychic factor in the production of hysterical pains and neuralgiae, and (ii) Slight underlying causes which irritate the "painful percept" in a hypersensitive sensorium (cerebrum).

THE PSYCHOLOGICAL CONCEPTION.

The mental <u>character</u> of the anaesthesia: -<u>Hysterical anaesthesia</u>.

(i) It is accompanied by a very deep and even exaggerated paralysis. (ii) There is no serious objective disturbance. (iii) There is no serious atrophy although the paralysis and anaesthesia may exist for months or years. (iv) There is no change in the reflexes in many cases. (v) There is no modification of the electrical reactions. (vi) The

LOCALISATION OF ANEASTHESIA.

Case of "Injury" to the Brachial plexus.

After Pierre Janet.



reflexes of the erectile organs remain intact. (vii) The reflexes of the pain remain intact. (viii) There are no trophic changes or ulcers in hysterical anaesthesia as seen in organic lesions. (ix) There is a curious and subjective symptom. "Indifference of the patient" - many hysterical patients are quite ignorant of this anaesthesia. Laséque and Charcot often insisted on this point. Many patients are much surprised when you reveal to them this insensibility. (x) Anaesthesias due to organic origin are different. Such patients experience a "horrible feeling" in contradistinction to "hystericals who are indifferent," and who "do not care." Another great characteristic is the "mobility" of these anaesthesias. Some hystericals may retain the hemianaesthesia for thirty or forty or more years. One patient retained a contraction of the visual field for forty years. As a rule anaesthesia becomes modified and disappears all at once for longer or shorter periods. M. Fere says, "It varies from moment to moment, and "under the influences of causes so slight that they "may pass unnoticed." However rapid in their mobility, the attacks modify considerably the localisation of sensibility. The sensibility is modified: it may recover entirely. During certain intoxications, insensibility vanishes more or less completely. Many

patients totally anaesthetic become entirely sensitive when drunk. Chloroform and morphia do away with these stigmata. After the use of morphia hypodermically restoration of cutaneous sensibility is noted. Abstinence brings back hysterical symptoms.

Under the influence of morphia we often see a diminution of the anaesthesis and a widening of the visual fields. As said before cessation of the drug causes the reappearance of the symptoms. Patients may have a general anaesthesia during their somnambulisms but the slightest excitation that directs their attention somewhat upon tactile sensitiveness causes this anaesthesia to disappear, even on parts that remained anaesthetic when awake, desprite suggestion. This restoration to sensitiveness of some subjects proceeds somewhat slowly and becomes evident only when the hypnotic state has been prolonged. Sensibility may be modified even in waking time and Briquet has insisted on the action of electricity. Magnets, metal plates, tuning forks, etc., have similar effects. The influence of suggestion may re-establish the sensibility. This is not very common, as many patients do not recover sensibility when it is suggested. Intoxications (CHC13, morphia), excitations due to alcoholism or certain changes of psychological state such as somnambulism have got great influence in modifying

sensibility. Many psychological phenomena destroy anaesthesia. Strong emotion, preoccupation, reveries may increase it. Hystericals find it exceedingly difficult to <u>fix</u> their attention. Laséque (1864) said that hysterical anaesthesia looked strange, and that it seemed to be a psychological perturbation, a sort of alienation. The anaesthesia of hystericals is extremely changeable and contradictory. These patients pretend not to feel, but we can prove to them that they feel perfectly well. Their insensibility is therefore Simulated.

Laséque (1864) said, "A person absent-minded "through a great preoccupation does not perceive sensa-"tions which, in another frame of mind, he would scarce-"ly have tolerated . . . It is probable that "hystericals, whose moral state offers so many other "singularities, acquire likewise through their very "malady, a sort of laziness that renders them less apt "to perceive certain psychic modalities."

Janet says, "Hysterical anaesthesia is a certain "species of absent-mindedness." There is in it a patho-"logical incapacity to collect the elementary sensations "in a general perception." Anaesthesias are groups of sensations forming a kind of system, that is to say the ensemble of sensations coming from the hand or the leg, which can no longer be collected with the totality of consciousness, although they still exist on their own account and even determine reflexes and usual movements.

HYSTERICAL DISORDERS OF SPECIAL SENSES. (Continued.) The disorders and aberrations of Vision in Hysteria:-

Vision is a very complicated function and plays a great part in the mind. In the disease hysteria there is an "analytic" power, and this neuroses tends to decompose the enormous psycho physiological system, and thus separates the various functions. Hysteria can thus dissociate or break up this complicated function of vision into many components. Firstly, it may separate at once the whole of the Visual function from the ensemble of the mind. Secondly, it may cause the complex Visual function to crumble, dividing and subdividing it into elementary functions. This peculiar, precise, and clear dissociation of function is seen practically only in this nervous and mental disease.

The typical Visual defect consists of a concentric retraction of the field of Vision, usually present on both sides but more marked on the side of the hemianaesthesia. J.M.Charcot drew attention to a further characteristic defect in the inversion of the fields for red and blue in addition to the retraction of all the colours and white fields.

The greatest disturbance of Vision in Hysteria is "Hysterical blindness." It is the dissociation of the ensemble of Vision. This phenomenon is happily very Extreme contraction of visual fields. Case of hysterical attacks. Disseminated areas of anaesthesia. Field for white, interrupted line; field for red, con: :tinuous line; field for green, dotted line.

(After J.M.Clarke.)





rare, for the hysterical subject always keeps as much as possible the essential functions, thus losing only a part of the Vision. Lepois (1618) pointed out, for the first time this hysterical blindness. Many French oculists, Borel, Landolt and others, have studied the aberrations of Vision in hysteria from time to time. This total blindness comes on usually in consequence of accidents, and is generally known as one of the phenomenon of "traumatic" hysteria. Many cases are on record in which total-blindness was the result of an accident to the face although the eyes were in no way injured, and nothing penetrated them and no pain in the eyes. Some patients may so remain totally blind for months and years but they ultimately recover their Vision, as no anatomical changes take place in the Vital Structures of the eyes. Thus hysterical "amaurosis" is complete only in a few cases, but in a great majority of patients the blindness is less serious as it lasts but a few days and complete Vision is restored soon after. Before giving your opinion always get an oculist to examine the eyes thoroughly. Exclude such injuries as lesions of the funduss of the eye, and of the optic nerve, of haemorrhages of the Vitreous body, etc., etc. Examine the pupillary reflexes which are as a rule normal in hysterical subjects. Complications due to the contractures of the "Iris" may

Extreme contraction of visual fields. Formerly hysterical paraplegia, now slight hysterical seizures. Field for white, interrupted line; field for red, continuous line; field for green, dotted line.

(After J.M.Clarke.)



exist; but do not rush to any hasty diagnosis. This blindness often times disappears in crises and in Somnambulisms. Jolly of Berlin, said, "Those children "who seem not to perceive any light, nevertheless avoid "obstacles unexpectedly put before them; they do not "behave like people really blind, they must have a "kind of perception." This complete amaurosis is very rare and is very perplexing to many physicians.

The simplest of these decompositions of the complicated function of Vision is "unilateral amaurosis" Total Vision is a system composed of two Visions. Very often you hear that many young hysterical people can see only with one eye, and of course they notice this defect only by chance. They see absolutely nothing when one of the eyes is shut but they see perfectly well when both eyes are kept open. This amaurosis presents itself in odd conditions. In such cases the eye is absolutely uninjured outwardly or inwardly and its important reflexes are quite unimpaired. It is well to remember that this blindness occurs without any impairment of the "elementary functions" of the organ. The reflexes of peripheric origin may be suppressed. Those peripheric reflexes are of course the corneal and the conjunctival reflexes. The touching of the cornea or conjunctiva will not bring on spasmodic closing of the eyelids. The reflexes to light

and accommodation are perfect in a great majority of cases. Contractures of the eyelids might mislead us in some cases. If physicians do not keep this condition of hysterical amaurosis ingmind they are liable to make mistakes, although one may never see any objective disturbance in the eye and the pupil may react to light perfectly well.

Is there any method of satisfying oneself whether a patient is a <u>Fraud</u> or whether there exists the real condition of hysterical amaurosis? We have a very reliable method.

Method: - On an absolutely dark ground, paste letters cut out of paper - some blue letters and some red letters. To the eye of the Subject apply a pair of eyeglasses, one of the glasses of which is quite the same blue tint as the letters, and the other of the same red tint. The red glass allows only the red rays to pass through and thus the red letters on the black ground are seen but the blue letters can never be seen for they get as black as the black ground on which they are pasted. The reverse of this is true for the blue glass. The result is that the right eye can only see and read one half of the letters, and the left eye the other half. A one-eyed person gan only read a part of the letters. A person who sees with both eyes instinctively completes one eye with the

other, and reads the whole word without difficulty. This apparently insignificant little phenomenon of unilateral amaurosis was intensely studied in France by Regnard, Parinard, Janet and Bernheim. Brewster the physicist made an ingenious observation. He said, "Press slightly one of the eyes when a subject is looking at any object, then he sees two objects instead of one, because the object is no longer painted on the 'concording points of the two retinas. This does not take place if the experiment is repeated with a oneeyed person. Verify this yourself by shutting one eye and slightly pressing on the other and although the object moves slightly it is not doubled. M. Parinard, the great French oculist, showed that the existence of the two eyes and their position gave birth to two different Visions. We have the "Monocular Vision" which is the only one Vision which many animals, such as horses, asses, etc., ... have, and whose eyes are on either side of the head. They can look to the right or to the left, they can alternate, but that is all. With higher animals (the anthropoid apes, monkeys, and some species of dogs) including man, the two eyes being on the same plane, things are far more complicated. These higher animals have the monocular Vision, the alternating Vision and also the "Binocular Vision." This complex binocular Vision consists in the synthesis

VISUAL FIELD: Hysterical Diathesis.

Normal in Right Eye Fig. I. Narrowed in Left Eye Fig. II.

After Pierre Janet.



of the monocular and alternating Visions, which enables us to see only one object with two eyes. What is the meaning of this? It means that this complex binocular Vision is a very great improvement on the preceding one for it allows us to see the same object (i) more clearly, (ii) permits fixity and (iii) gives relief. Although we almost always make use of this complex binocular Vision, we still retain the possibility of using the inferior Vision. which we utilise in many cases, sometimes voluntarily as when shooting, and looking in a microscope, and other times involuntarily when seeing sideways. What is most important for us is to remember that hysterical subjects, so to speak, get degenerate, i.e. they effect the dissociation of these two Visions - losing the truly human and complex binocular Vision, and using only the simpler and lower monocular Vision. These patients never complain of this defect and it is only revealed when they are examined medically. Such patients with monocular Vision cannot use the stereoscope. This singular hysterical amaurosis dissociates the Visual function, and as we have seen, may get apart the binocular function or the monocular function.

The most important symptom in hysterical disturbances of Vision is "Narrowing of the Visual field." The human sight extends over a certain surface. The

"Visual field" is the extent of the surface an eye can see simultaneously without moving. Measure the Visual field of a normal subject by the use of suitable instruments such as "Perimeters" and "Campimeters," and you get the "normal Visual field." (See diagrams). This Visual field has the form of an irregular circle, far more extended on the external and on the inferior sides where it measures about 90°. Which means that the angles formed by the fixation point. the eye for Vertex and the limit of the Visual field is 90°. Remember that the circle is normally narrowed on the internal and superior sides, where it is barely 60°. The obstacles to this natural diminution, as we are aware, are the eyebrows and nose. What do you notice in hysterical subjects? The Visual field is narrowed concentrically in this neurosis. This is a most remarkable and constant phenomenon. The extent of the Vision becomes smaller and the Visual field is practically a circle at 30°, 25°, or 20°. In extreme cases the Visual field has only 10°, 7° or 5°, and nothing but the mere fixetion point is left. This diminution of Visual field may occur in two other diseases, namely, (i) Chronic Glaucoma, and (ii) Pigmentary retinitis. How are we then to distinguish this diminution of Visual field from that of true hysterical diminution of Visual field? We have indeed a few guides, (i) The age and sex of the

patient, (ii) The fact that the diminished Visual field in Hysteria is almost a "circle" but the same diminished Visual field in chronic glaucoma and pigmentary retinitis is extremely "irregular." (iii) The fact that there are no lesions of the fundus of the eye in Hysteria but there are typical Visible lesions of the fundus of the eye in chronic glaucoma and pigmentary retinitis.

It was once believed that this concentric contraction of the Visual field is found in epilepsy and also in disseminated Sclerosis. But now this is disproved. Hence this symptom of concentric contraction or diminution of the Visual field is a most important "diagnostic" sign in hysteria. Real contraction of the Visual field seen in chronic glaucoma causes the greatest inconvenience to the patient who can only see one word or one syllable at a time. These patients can no longer go about in the streets but they can see well in the "centre." What happens in hysteria although there is concentric diminution of the Visual field? These hystericals are not so handicapped and run about as if nothing is wrong with their eyes. This is a most remarkable fact and is this not an excellent example of the persistence of sub-conscious sensations in hysteria.

We all have two Visions, the (i) "Central"

A CASE OF HYSTERICAL HEMIANOPSIA.

Limits of the "Conscious" field - Fig. I. Limits of the "Subconscious" field - Fig. II.

After Pierre Janet.



Vision, which is accurate and attentive, and the (ii) "Peripheric" Vision, which is vacant and of secondary importance. Normal subjects keep both these Visions consciously but hysterical subjects keep only the first (central) Vision consciously, and the second (Peripheric) persists only subconsciously.

There is yet another very important point. Can we meet in hysteria with the phenomenon of <u>hemianopsia</u> or with the <u>hemianopsical</u> Visual field? Is it true that there is only concentric contraction of the Visual field in Hysteria? Can the Visual field be not modified in any other way?

The Vision of only one half of the Visual field, i.e. the condition of Hemianopsia is very often seen in lesions of the cerebrum, in lesions of the optic nerves, in lesions of the occipital lobes, and in lesions of the cuveas. All these do away with the Vision in one of the Vertical halves of the retina. Many physicians deny the existence of hysterical hemianopsia. They say that this condition occurs only in "organic lesions." Every function has its organic centre, and, in certain cases the functional and organic disturbances may be alike. There is no disturbance more symptomatic than hysterical motor hemiplegia. It is the same with hysterical hemianopsia and it does exist in hysteria. M. Déjerine,
and P. Janet worked on this subject, and conclusively proved in 1894-95 that functional hemianopsia does occur in hysteria. Hysterical hemianopsia begins in some cases with amaurosis. During recovery the hysterical amaurosis may take the "hemianopsic form." The eye has a right half and a left half like the rest of the body, and a distinct function of the Vision to the right and of the Vision to the left will form. comprising the two right halves and the two left halves of the two eyes. We know that there still exists a function of the Vision to the right and another of the Vision to the left. These Visions may become "dissociated" in hysteria and thus we sometimes really have functional or hysterical hemianopsia. Hysterical amaurosis may occur in children.

Let us consider some other defects of the eye in hysteria. We have the loss of the Vision of "colours" - the familiar condition known as "dyschromatopsia". Many hysterical subjects fail to perceive colours or at any rate some of them, although these patients have an excellent Visual acuity. "Red" is the most persistent colour, and hence many hystericals have a great fondness for red colour. Violet and blue seem to vanish first, and then green also vanishes. The perception of colours at the periphery of the Visual field changes very much, even in a normal person, according to all kinds of conditions, and in particular, according to the lighting.

Other accidents such as "the disturbances in the motion of the eyes" are common enough in hysteria. The eyelids may show paralysis, tics, contractures, etc., The most common motor affection is spasmodic contraction of the lids, which may take the form of either tonic or clonic spasm, and may affect one or both eyes. It may appear or occur after a fit or consecutively to slight conjunctivitis, or without any apparent cause whatsoever. Clonic spasm may occur during a fit and also in some cases of trance. Tonic spasm of the eyelids is more permanent and is usually one-sided.

Koenig in 1891 laid special stress on "ophthalmoplegy." In this condition certain subjects are unable to move their eyes. Their look is fixed, and they seem strange. The most frequent cause of such fixity of the look is often connected with an automatic fixation of certain objects or with certain hallucinations. But in some instances the subject looks at nothing fixedly - the eyes do not move but the patient could move his head and look at other objects (i.e. the eyes are fixed). In this condition the subconscious and automatic motion is retained, whereas the Voluntary motion is lost. The ccular

HYSTERICAL AMBLYOPIA.

Typical visual defect in Hysteria, a concentric contraction of both fields of vision, more marked on the side of the hemianaesthesia, with inversion of the red and blue fields.

(Case published in the St. Thomas's Hospital Reports for 1890.)



muscles may show spasms and irregular contractures. The result is all possible forms of Strabismus. since the eyes will deviate in all directions. Marked convergent strabismus is not infrequent in a fit. The "internal muscles," more especially the muscles of the crystalline lens, may get affected. Here we again get a "dissociation of function," and in this case that of "accommodation." These patients have only a very limited accommodation, and are not able to accommodate their eyes to various Visions (the normal from 25 or 30 centimeters to the horizon). This "spasm of accommodation" is connected with a great many hysterical disturbances such as monocular diplopia, polyopia, macropsia and micropsia, etc. Objects may be seen too large or too small in one of their halves only, and quite normal in the other - a kind of hemimacropsia or hemimicropsia. There are two great views on this subject (i) That these accidents are interpreted according to "physical" laws (contracture of the crystalline lens, etc..) (ii) That these accidents are "psychological" phenomena.

Hysterical amblyop ia occurs in young girls and young women, sometimes in young male subjects. The most constant symptom is a diminution in the acuteness of Vision which may amount to total blindness. As MODEPATE CONTRACTION OF VISUAL FIELDS.

Fields for white only.

(After J.M.Clarke.)



already observed the field of Vision is concentrically contracted. If the physical examination of the eye is prolonged this limitation becomes very marked, since the retina becomes exhausted rapidly. The sizes of the colour fields are altered and reversed. There may be Scotoma or hemiopia. Other ocular symptoms - blepharospasm, corneal anaesthesia, monocular diplopia, ptosis, etc., may be present.

Let us endeavour to summarise the chief disorders of Vision met with in Hysteria. The most characteristic alteration is a "concentric contraction" of the Visual fields which are as a rule regular. This contraction is on both sides but much more pronounced on the side of the hemianaesthesia. The concentric contraction when very slight may be limited to one eye. The contraction may be extreme in some cases or very slight in other cases (Examine the diagrams). The fields of Vision for colours are oftenest affected - Violet and blue disappearing first and red persisting to the last. The normal relations in size of the colour fields may be reversed, red becoming the largest. Contractions of the Visual'fields may occur without any anaesthesia in association with paralysis or contracture. Acuteness of Vision is never affected except in some extreme cases of hysterical amblyopia. When there is considerable

A CASE OF HYSTERICAL HEMIANOPSIA.

Unilateral amaurosis - Period of Recovery. Fig. I. Right Eye. Fig. II. Left Eye.

After Pierre Janet.



concentric contraction of the Visual fields there is also a loss of Visual acuity. There is no complaint of defective sight in hysterical people as the central Vision remains good, and as we have already remarked, it is only the peripheric Vision that fluctuates. Always remember never to prolong your physical examination of the eye in hysteria, for if it is unduly prolonged a field may be obtained which progressively decreases with the length of the examination. Always, in hysteria, determine the extent of the field along a few diameters only at a time never attempt to prolong your examination. Cases of complete blindness are very rare but more usually there is loss of Vision in one eye. This unilateral amaurosis may come on suddenly after traumation or a fit or may gradually develop from a "contracted field". It may clear up abruptly and rapidly, or may do so gradually. Experiments have definitely proved that the patient does in reality see with the so-called "blind eye" though the images perceived do not rise into consciousness. These Visual disturbances are highly susceptible to psychical disturbances and are of central origin. They are amenable to suggestion, as for instance, they are transferred to the opposite side by metallotherapy. They may be altogether removed by such means as

putting a piece of plain glass before the eyes. etc. These patients have seldom any difficulty in seeing their way about. These conditions closely simulate "malingering." Retinal hyperaesthesia is one of the commonest of ocular symptoms - the patients always prefer a dark room to a bright room. Remember there is no change in the fundus oculi or optic disce even after these Visual troubles have lasted for many years. Unlike is the case in the two conditions. pigmentary retinitis and chronic glaucoma, which we have already studied. There is no increased acuteness of Vision in hysterical subjects although photophobia is common enough. True "nystagmus" is never seen in hysteria although "nystagmoid jerkings" are common enough. Hysterical ptosis (pseudoptosis) affects only one eye. It simulates true ptosis but slight fibrillary contractions can generally be made out in the affected eyelid. Furthermore, the eyebrow in the hysterical form lies at a lower level on the affected side than on the sound side, whilst in true paralytic ptosis it lies higher, owing to the compensatory over-action of the frontalis. Our conclusions are that in hysteria:-

 (i) The disturbance in Vision is never very profound.
(ii) This disturbance always bears on attentive and voluntary perceptions.

- (iii) The disturbance always spares the elementary sensations.
 - (iv) The disturbance spares the anatomical movements and reflexes.
 - (v) The disturbance seems to consist in a very curious "dissociation" of the different functions united in the complex function of Vision.
 - (vi) These dissociated or separated units proceed on their own account, and separate themselves from personal consciousness.
- (vii) It is only the peripheric Vision that fluctuates in this disorder - the central Vision being almost never affected.

HYSTERICAL DISORDERS OF THE SPECIAL SENSES (Continued)

The Disorders of Hearing in Hysteria:-

Beware of hysterical deafness. It is frequent, and if I mistake not, occasions very numerous errors in diagnosis. Always remember that hysterical deafness is a central not a peripheric deafness. When the deafness is peripheric, when it is due, for example, to obstruction of the canal, to a disease of the ossicles, or to a disturbance in the aeration of the drum, the patient keeps the "central" audition. The patient can hear a watch applied to the teeth or skull bones, i.e., the vibrations transmitted through the ears can still be heard, whereas they can no longer be transmitted by the air. It is just the opposite in central deafness, and this central deafness is often seen in hysteria. The aural deafness betrays its nerve origin by osseous conduction being diminished, and Rinne's test being negative. "Tinnitus aurium" occurs as a part of the aura in many hysterical subjects. These subjective noises are annoying to the patient, and not easy for the physician to stop them. There may be hallucinations of hearing as a sequel of a severe hysterical fit, but fortunately they are rare.

Hysterical deafness is most common as part of an hemianaesthesia - complete deafness may prevail on the side of the hemianaesthesia. In such cases the auditory meatus and tympahum also show anaesthesia. We can touch the tympanum with cotton wool or a feather without the patient's knowledge. There may be "bilateral deafness" but the condition is most marked on the side of the hemianaesthesia. The "degree of deafness" bears a relation to the completeness of the anaesthesia, and as a rule deafness in hysteria is incomplete and unilateral. Deafness in hysteria need not necessarily be associated with anaesthesia. It may come on suddenly and without other symptoms. There are other anomalies of hearing in hysteria - Sometimes sounds produced near the ear are not at all audible, whereas distant sounds and whispers are distinctly heard.

The Disorders of Taste in Hysteria:-

Taste when affected is often lost over the whole tongue. It may be associated with hemianaesthesia. The loss generally affects all forms of taste. As we will observe in detail under the function of Vision, this function of taste may be "dissociated." It is well known how hystericals love pungent and other strange articles of food or drugs. It is important to remember that tactile sensation may be lost over the whole or one side of the tongue without any affection of the taste sensation. Loss of taste without loss of common sensation in the mouth is extremely infrequent. Loss of taste is usually accompanied by loss of common sensation over the mouth and tongue.

The Disorders of Smell in Hysteria:-

"Anosmia" in one nostril is the commonest affection of smell. It is in association with hemianaesthesia and on the anaesthetic side. Anosmia may occur without loss of common sensation in the nostril. Loss of smell is practically never an isolated symptom, and if so, it is extremely rare. It is usually associated with hemianaesthesia. This loss of smell may affect both nostrils. Always make sure that there is no disease of the bones present, and exclude such conditions as the chronic suppurations of the nose and air-sinuses, tuberculous osteomylitis, fetid atrophic rhinitis (oezena), syphilis and actinomycosis. In a typical case of hysterical hemianaesthesia we have loss of smell and common sensations in the corresponding nostril and loss of taste and common sensations on the same side of the tongue.

THE DISTURBANCES OF SPEECH IN HYSTERIA.

The function of Speech plays a considerable part in every impairment of thought; it is always more or less modified in all intellectual disturbances.

In antiquity certain impairments of speech had already been noticed, the rapid evolution and the surprising cure of which seemed unaccountable. Hippocrates writes: "The wife Polemachus, having an arthri-"tical affection, felt a sudden pain in her hip, as "her menses had not come; having drunk some beet root "water, she <u>remained voiceless</u> for the whole night "until mid-day. She could hear and understand; she "showed with her hand that the pain was in her hip." Remember the story of Croesus's son, the dumb young man who suddenly recovers his speech to cry: "Soldier, do not kill Croesus."

The English surgeon Watson boasted of having, through an electric current, restored the power of speech to a young lady who had been voiceless and dumb for twelve years. Briquet, Kussmaul, Charcot, and others insisted very strongly on these phenomena.

This accident (mutism) may happen to confirmed hysterics after a fit or a somnambulism, or may happen to apparently healthy people. It is almost always brought on by a great and somewhat <u>sudden</u> <u>emotion</u>. It may be perfectly cured for some time but any fatigue or emotion bring about the same accident again and again. Cases are on record that many patients have remained speechless for a very long period, - one man never recovered his speech for 26 years, another man for 12 years and so on. In other observations the dumbness begins in young women on occasion of a fire, of the breaking off of a betrothal, or of a quarrel with her parents.

Sometimes the emotion bears on the organs of speech or respiration. It comes on after a sore throat or a disease of the chest. Hysterical hemiplegia is known to be associated with dumbness. These accidents are due to some trivial injury. The patient looks healthy and is not paralysed; he has not that weak and sickly appearance of persons struck with organic hemiplegia. There is no visible intellectual weakness and the patient is usually lively and intelligent. He does not try to answer, nor does he make efforts of speech that an aphasic person makes. In motor aphasia due to an organic lesion, the patient is always able to utter a few words, such as "yes," or "no," or to make some ejaculation. Further in hysterical mutism the patient has the power to hear and understand everything that is said. In one word, there is no imperfect speech in hysterical mutism but no speech at all.

Examine the different peripheric organs and satisfy yourself as to the <u>total absence</u> of paralytic phenomena. The lips, cheeks, tongue, and soft palate <u>move easily</u> in the normal way. The patient is able to move his lips, bare his teeth, smile, draw up the lip on one side and then the other and make all the tongue movements without any difficulty. If there are any motor impairments at all, they are veryslight, and quite inadequate to account for the enormous paralyses of speech which are to observed.

Cartaz said: "There is no great disturbance in the vocal chords." Certain writers have tried to establish a certain <u>degree of paresis in the adduction</u> This disturbance is <u>purely mental</u>, there is no pathological lesion.

In <u>aphasias</u>, the subject feels that he has lost the use of speech, and he makes <u>desperate efforts</u> to express himself. These efforts have some success he can give cries, make varied noises with his larynx; oftenest he has retained a few words. A person who cannot speak at all very seldom keeps all the other functions of speech intact. He has nearly always considerable disturbances of writing; he can no more read, or he reads with difficulty and lastly he <u>does not</u> understand the <u>words spoken</u>.

We all know the classification of the disturbances of speech made in this connection according to the predominance of such or such a symptom: motoraphasias, agraphias, sensorial aphasias with wordblindness and word-deafness. Nothing of this kind is seen in hysterical mutism. In it motor speech is <u>completely</u> done away with, and the patient never attempts to speak. Further that hysterical dumbness is more <u>restricted</u>, for the disease seems to be limited to the expression of words, and not to impair kindred phenomena, such as writing, reading, etc. Charcot has recorded many cases of motor-asphasia or aphemia in hysterical patients, but <u>word-blindness</u> and word-deafness are very rare indeed.

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Often, in the midst of this state of aphasia, many patients have kinds of reveries or deliriums, in which they express aloud, either <u>fixed ideas</u> which preoccupied them or conversations they had just had. In all these slight deliriums, they speak very correctly and there is no trace of aphasia left. They were quite involuntary words. Oppenheim and Gilles de la Tourette, describe <u>dumb patients</u> who <u>spoke</u> during their <u>dreams</u>.

Read, in the History of the Camisards in the 17th Century, the anecdotes relating to the lesser prophets of the Cévennes, and to the most celebrated among them all, <u>Elie Marion</u>. He felt himself, as it were, seized by the Lord, he could no longer dispose of his voice, or speak voluntarily, he <u>did not know</u> <u>what his mouth was about to utter</u>, and was quite surprised at hearing the fine discourses with which the Holy Ghost inspired him. He also feels that his hand escapes his control and is no longer ruled by his will; he is quite <u>surprised</u> at <u>seeing</u> what <u>his</u> hand has written.

There is sometimes anaesthesia over the throat and chin, or less often hyperaesthesia. Not infrequently the loss of speech is accompanied by spasm of the masseters, by difficulty in swallowing, etc., etc.

May we repeat again that hysterical mutism may be accompanied by <u>agraphia</u> and even with a certain degree of word-blindness, in some cases.

The recovery may be <u>sudden</u> but is more commonly <u>gradual</u>. Complete regain of speech may be preceded by a long or short period of stuttering, or the patient may be able to whistle or sing before he can talk.

"Hysterical Stammering" may be a transitory phase in the recovery from mutism. It may be met with alone, especially in children, after a fright or shock.

DISTURBANCES OF RESPIRATION IN HYSTERIA.

Respiration depends on complex organs, the nose, the pharynx, the glottis, the thoracic cavity and the diaphragm. It cannot be effected correctly if everything does not work at the same time and in the same direction. It is useless to dilate your thorax if you shut your glottis or swell your diaphragm and this is exactly what hystericals do. The efforts they make in their various organs are contradictory, and that is the reason why they make only very little air enter their chest, in spite of great efforts. Spirometric measures show that hystericals breathe very little in reality, in spite of great apparent heavings of their thorax and abdomen.

We know that about 1816, <u>Cheyne</u> of Dublin and <u>Stokes</u> described a certain quite special irregularity of respiration. At the outset this phenomena was only established in cerebral apoplexy, in most forms of agony, and in some cerebral tumours. Later on, it was found in <u>typhoid</u> fever, in uraemia, in various intoxications. <u>M. Mosso</u> showed that it existed in <u>simple natural sleep</u>, and, in general, in all states of <u>general numbness</u>. P. Janet has conclusively shown that the Cheyne-Stokes' rhythm of respiration was common in <u>hysterical</u> subjects. He proved that this respiration exists in subjects who are in a condition of half-sleep and who are incapable of any attention. It vanishes when the patient is more awake and more active.

Among other disorders we may have apnoeas, Dyspnoéas, suffocations, respiratory disturbances, respiratory paralyses, tics, polypnoéas, yawns, sighs, sobs, hiccoughs, coughs, sneezes, barks, etc, etc. Dyspnoea.

In some cases it is due to spasm of the glottis. This affection may occur in paroxysms. The vocal cords instead of separating during inspiration, come together (functional inspiratory spasm), so that there is stridor during inspiration, and are only slightly separated during expiration. When, however, a <u>careful laryngoscopic examination</u> is made, the cords are <u>occasionally seen</u> to <u>move well.outwards</u> during expiration, and this is a point of distinction from paralysis of the abductor muscles, due to organic disease, to which the symptoms afford a close resemblance ("A System of Médicine," Clifford Allbutt, Diseases of Larynx, Vol.IV, p.848).

Aphonia.

This is a frequent phenomenon in hysterical cases, either appearing alone, or alternating with other hysterical symptoms. It may come on quite suddenly, or may supervene on a gradual loss of voice. The duration is very uncertain, hours, days, or months.

Frequently it can be made to disappear for a time by intra-laryngeal faradism, etc. Sometimes it follows on laryngeal catarrh, a very slight attack being sufficient to induce a consecutive aphonia. On laryngoscopic examination the appearance of the larynx is normal, but the vocal cords either remain divergent on attempted phonation, or more commonly are imperfectly approximated, so that an elliptical chink is left between them (paralysis or paresis of the adductors and tensors of the vocal cords). In other cases the inter-arytinoid muscles only are paralysed, then the vocal cords are approximated in their anterior three-fourths on phonation, but a triangular chink is left posteriorly. A great point of diagnostic importance is the insensitiveness of the fauces and of the larynx itself, rendering a laryngoscopic examination easy - in such cases the interior of the larynx may be touched with a probe and be found quite anaesthetic. or a laryngeal bougie passed through the vocal cords without any pain or discomfort.

Cough.

This may be an isolated symptom, or may accompany dysphoea. It is a loud, hard, noisy, resping or hacking cough occurring in young adults and in children in paroxysms. There is no expectoration or any sign of disease of lung or larynx. Often the spasm consists of a long inspiration followed by a series of short noisy expirations. Other noises produced in the larynx resemble the cries of various animals; a barking sound is a frequent one. Epidemics of these noises may occur, as in the instance given by Gilles de la Tourette, in which the nuns in a convent took to miauling like cats. Attacks of long-continued and violent yawning, sneezing and hiccough occur, and such attacks may end in an hysterical fit. Neurotic boys about the time of puberty frequently have a loud barking cough (cyrrobex hebitica) and Sir A.Clark first called attention to this fact.

Hysterical Tachypnoea.

There may be increased rapidity of the respiratory movements; there may be as many as 60 or 80 or even 160 respirations to the minute. The pulse is not accellerated, the temperature is normal. There is no distress and the onset is generally sudden.

These attacks are sometimes preceded by symptoms like those of an aura, and may end in an outburst of weeping. In some cases the respiratory disturbance is determined by a trivial or slight bronchial catarrh. Sometimes inspiratory spasm of the <u>diaphragm</u> is seen. At <u>regular intervals</u> there is a <u>contraction</u> of the diaphragm, which gives rise to deep sob and is accompanied by slight associated movements of the mouth and nares. The <u>spasms are painless</u> and they cease during sleep. They may occur regularly for weeks or months, and cease suddenly.

DISORDERS OF THE CIRCULATORY SYSTEM IN HYSTERIA.

The affections of the circulatory system in Hysteria are various, as <u>evidenced</u> by disorders of the <u>peripheral</u> circulation in the skin. From analogy it is often argued that other hysterical disorders, not so accessible to direct observation, may owe their cause to similar disturbances of the innervation of the vessels, and to consequent interference with the nutrition of the part.

Hysterical Angina Pectoris.

This is not a common affection. This attack begins with a feeling of faintness, oppression, bursting or actual sharp pain over the cardiac region. There is often a sense of suffocation, with pallor of the face, and coldness of the surface of the body. The pulse becomes rapid and the respiration is affected, becoming rapid and shallow. The patient constantly moans, groans, or may utter loud cries or screams; she snatches at her throat, presses her hands over her heart. The attack lasts a few minutes and passes off; as it does the face gets flushed and the pulse is alcwed. There may be a profuse sweat and the attack end in a sense of utter exhaustion or in a fit of sobbing or weeping. The patient has a dread of impending death especially in the first attacks - afterwards she becomes more

or less accustomed to them. Remember the moaning, screaming, and restlessness or <u>tendency to move about</u> is never seen in <u>true angina pectoris</u>. Haemianaesthesia is usually found on the left side in such cases. Hyperaesthesia over the left breast and praecardial region is sometimes very marked. It is aggravated during and after an attack of hysterical angina. Pains may radiate from the praecardial region <u>down the left arm</u>. In some cases feelings of tingling, pins-and-needles, etc., begin in the fingers of the left hand and <u>passing up the arm</u> inaugurate an attack.

The <u>hyperaesthesia</u> of the praecardial region may be so great as to resemble an actual <u>hysterogenic</u> zone. Several attacks may occur in course of the day, and this may go on for months or years. These anginoid attacks occur more frequently at night (I have seen these in a male patient about 26 years old) than other hysterical paroxysmal manifestations, and the patient may wake from sleep to find one coming on.

Hysterical Pseudo-Angina.

This is another kind of attack in which the symptoms belong more to the Vasomotor type than to the heart itself. In these the <u>coldness of the surface</u>

preceding the attack itself is more marked; the face may appear ashen grey and bear an anxious expression. The blood pressure may be raised. The patient feels faint and lies quietly, or may sigh, be restless and toss about. With these symptoms there is complaint of "pain in the heart." Hysterical disorders of sensation (Hyperaesthesia, hemianaesthesia, segmental anaesthesia, etc.,) can often be found. There is generally evidence of a rise in tension and of under filling of the peripheral arteries; in the ordinary regulation of blood pressure this goes on with dilatation of the splanchnic vessels. Dilatation of these vessels brings about a rapid fall in the pressure of the systemic arteries, and at the same time causes a depletion of the intracranial vessels (cerebral anaemia or ischaemia). Emotions may easily and profoundly affect the Vasomotor system. The mode of production of these attacks, and of these of hysterical syncope, may therefore be ascribed to a rapid dilatation of the splanchnic area from causes insufficient to produce such an effect in the healthy. The frequent recurrence of these attacks, and the absence of any evidence of heart disease clears up the diagnosis, which cannot therefore always be made until the patient has been a little time under observation.

"Nitrite of amyl" and other Vasodilators usually relieve these attacks of hysterical angina pectoris.

Hysterical Syncope (faintness)

Some of these are produced in the same way above given, but others are hysterical fits of the quieter or milder variety.

Slow Pulse in Hysteria.

Slow pulse in <u>not common</u> in hysteria, but occurs in hysterical trance or attacks of sleep, when the rate may fall so low as 45 or 40 beats to the minute and the pulse wave to be exceedingly small and feeble (See Löwenfeld, Vol.II, p.422). In the most marked cases of <u>hysterical trance</u>, in which the patient has often times been taken for <u>dead</u>, the pulse may be imperceptible at the wrist. The heart's action is extremely feeble in such cases.

Rapid pulse in Hysteria.

<u>Palpitation</u> is the most frequent circulatory disturbance in hysteria, and is associated with <u>throbbings</u> in the vessels. There may occur a persistently rapid pulse, lasting a considerable time; the diagnosis will be aided by the absence of any other signs of circulatory embarrassment. The diagnosis has also to be made from the irregular forms of <u>Graves' disease</u>. Remember that the <u>exces</u>-<u>sive pulsation</u> of the <u>abdominal aorta</u> is by no means peculiar to hysteria, and exclude any aneurysmal dilatation by the absence of any enlargement of the aorta.

Lastly, hysterical disorders of the heart may complicate organic disease of that organ. Thus, a patient who has a <u>mitral lesion</u> as a sequel of chorea (Rheumatic) may subsequently become the victim of hysteria. The greatest difficulty of the kind is met with in cases of <u>aortic disease</u> in young women who also present marked hysterical tendencies. HYSTERICAL AFFECTIONS OF THE ALIMENTARY TRACT.

The function of alimentation, from a psychological standpoint, is one of the most considerable systems of thought that exist in the brain of an animal. It comprises many important phenomena - the feeling of weakness, of depression, and the fear of death. Further, it comprises the sensations and motions connected with all parts of the organism from the lips, hands down to the rectum and anus. It comprises also the phenomena of improvement, as the images of pleasant aliments, the habits of eating cleanly, etc., etc. Remember that there is in the hysterical a dissociation of this enormous system, which may totally or. partially withdraw from consciousness. In complete anorexia nervosa, we find the loss of all the elements above described.

The greatest and most remarkable digestive disturbance in hysteria is the "Anorexia nervosa" of Sir W. Gull. "To call it loss of appetite - anorexia -"but feebly characterises the symptom. It is rather "an **an**mihilation of appetite, so complete that it seems "in some cases impossible ever to eat again. Out of "it grows an antagonism to food which results at last "and in its worst forms in spasm on the approach of "food, and this in turn gives rise to some of those "remarkable cases of survival for long periods without "food." (Mitchell). Gull in 1868 had indicated these facts, and the article of Laségue was the only one that had success and contributed to spread this new medical notion.

This accident may happen in the course of hysteria after many characteristic phenomena, which will serve for its recognition. Oftenest it forms the outset of hysteria and its real nature is only recognised late. It is frequent in young women, and a case has been cited at the age of eleven (Kissel); P. Janet observed one in a little girl of nine, and it has been recognised in a woman of thirty eight. The greatest number of cases however are to be met with in <u>girls of</u> <u>sixteen to twenty five</u>. It occurs usually as a <u>chronic disease</u> in girls about eighteen or nineteen years and it may go on for a few <u>years</u>. The result is that it goes through different periods, and Laségue classifies them as follows:-

(i) The Gastric period: - Everybody fancies that the disease consists simply in an affection of the stomach. There may be loss of appetite, regurgitation of food and vomiting, and constipation.

(ii) The moral period, i.e., the period of struggling. This begins after a long time and the patient locks apparently healthy and shows much strength and activity although she eats no food. She had no appetite, and never wants any food.

(iii) The period of inanition - This last period

is the critical period - the period of emaciation. Organic disturbances begin to diapppear, the breath is foul, the stomach and abdomen are retracted, there is an insuperable constipation, the urine is scarce and contains little urea - only three or four grammes instead of the usual thirty grammes. The skin becomes dry, cracks, and gets covered with pimples and scabs. The pulse becomes very quick, between 100 and 120, the breathing is short and hurried. In this condition the patient remains in bed, - in a semi-delirious and semi-comptose condition. The condition looks very alarming indeed but remove such patients to a hospital or the nursing home and give them the Weir-Mitchell treatment. Recovery is very remarkable indeed. Death may follow in extreme cases due to emaciation and asthenia but curiously enough even in such cases no lesion is found post mortem, Some intercurrent malady - bronchopneumonia or pulmonary tuberculosis may carry away the patient. If the patient survives hysterical tympanitis is a common feature, caused by tonic contractions of the diaphragm and retraction of the other abdominal muscles. It may be associated with the condition of peristattic unrest. This hysterical meteorism appears to be produced in some cases by the swallowing of air. Meteorism may be general, but more commonly affects only one part of the abdomen, usually the hypogastric region. When there is amenorrhoea pregnancy may be simulated. An

obstinate form of diarrhoea in some proves very intractable and associated especially with the taking of food. An entirely different form may be found in other people - hard scybala are passed frequently during the day, sometimes with great violence due to the irritable rectum (Mitchell). Constipation is very common due either to the loss of tonicity of either the involuntary muscles of the bowel or the abdominal muscles. It may be protracted for three or four weeks leading to great accumulation of faeces. Other troubles are <u>anospasm</u> or intense pain in the rectum apart from any fissure.

Another hysterical disorder is the very intractable and persistent pains in the intestine of a burning or cutting character. These pains are sometimes aggravated by depecation. In one form they are limited to the rectum, when they are increased after each action of the bowels, but persist to some extent in the intervals.

Hysterical ileus and faecal vomiting are the most remarkable of hysterical phenomena. Parke Weber ("Faecal vomiting and Reversed Peristalsis in Functonal Nervous (cerebral) Disease.") says: "The constipa-"tion becomes absolute, and the other symptoms (abdom-"inal pain, vomiting and meteorism) get worse, and "finally the condition of hysterical ileus' is reached. "Then everything taken by the mouth is returned. The "vomiting becomes faecal in character, and even "pieces of formed faeces may be ejected by the mouth." Instances are also recorded, especially by Gilles de la Tourette, in which, apart from the possibility of deception, <u>enemata</u> were ejected by the mouth, and <u>suppositories</u> have been similarly returned. Such symptoms may continue for weeks or even months, with remissions. The return by the mouth of faeces, enemata, suppositories, etc., is shown by Dr Weber to be due to a "reversed peristaltic" action of the bowels. Patients who have suffered from this genuine disorder have sometimes been detected later in attempts at deception.

<u>Hysterical vomiting</u> is not uncommon; the exact cause of it is difficult to state. According to some authors the mucous membrane of the stomach is hyperaesthetic, or the seat of a hysterogenic zone.

Such is the general history of this strange <u>mental disease</u> (anorexia nervosa). Its gravity, its frequency, the regularity of its evolution, whatever may be the intelligence of the subject, show that it is due to a <u>deep psychological disturbance</u>, of which the refusal of food is but the outer expression.

P. Janet maintains that these patients have no real anorexy but they get up at night secretly and steal any food they can get. They have neither real loss of the feeling of hunger, nor any real anaesthesia of the mouth or stomach. Bureq once said, "Anaesthesia exercises a preponderant influence on all "the other symptoms, in particular on the disturbances "of alimentation and on the secretions." His great argument was that he could cause the anaesthesias to vanish through the use of the <u>metallic plates</u> and armatures he had contrived, and that he then saw the hysterical phenomena, anorexia in particular, <u>disappear</u>.

M. Pawlef, the Russian physiologist has shown that the saliva secreted by a dog varies with the object presented to him, with the taste and smell of that object. They have shown that the secretions of the stomach and of the intestine were in connection with the sensation of the food in the various parts of the digestive tube. It is the <u>pastric anaesthesia</u> which is at fault here. While the sensation of the movements and of the feeling of appetite, the immobality and insensibility of the stomach bring on complete anorexy and all the delirious ideas, which are considered here as secondary.

There is yet another phenomenon which is of great interest. The anorexic patients are <u>excessively fond</u> <u>of physical exercise</u>. Laségue noted this character and Dr Wallet ("Deux Cas d'Anorexie Hystérique," Nouvelle Iconographic de la Salpetrière, 1892, p.276) says: "The patient is exceedingly fond of long walks. "As she is growing thinner with enormous rapidity, they "are forbidden to her. She then begins to walk from "morning to night, up and down the little garden of "the house, which was likewise forbidden to her. Then "she plays all day at shuttlecock. It is prescribed "that she stay in her room; there she gives herself up "to violent gymnastic exercises. Even in bed she goes "on with her gambols and somersaults."

The first explanation of this fact was presented by Lasegue and by Charcot. These patients walk too much and take too much exercise by virtue of a piece of reasoning: they want to make those around them believe that they are still strong and robust, in order not to be compelled to eat more. P. Janet treats this point from a psychological basis. He maintains that this disturbance first comprises the suppression of the feeling of fatigue. He says that it comprises a general excitation to physical and moral activity, a strange feeling of happiness, an euphoria. The need of food goes with the feeling of weakness and depression; persons depressed by neurasthenia are great eaters. The exaltation of the strength, the feeling of euphoria does away with the need of eating. Dysphagia in Hysteria.

This is due to tonic spasm of the pharyngeal muscles of swallowing, and of the cesophagus. An attempt to swallow brings on a spasm by which the food is immediately rejected. Persistent cases of this kind may give rise to the suspicion of an organic stricture of the <u>Desopha-</u> <u>gus</u>. Pass a bougie and clear up the diagnosis. Sometimes this affection is very severe and obstinate and leads to malnutrition and even death. Rapid <u>clonic</u> <u>contractions</u> of the pharyngeal muscles have been described in one case.

According to some authorities "Globus hystericus" is due to a spasmodic contracture of the oesophageal musculature <u>rapidly ascending</u> the tube and passing on to the <u>pharyngeal muscles</u>.

Another occasional cause of dysphagia is pain on swallowing - the patient feeling an intense pain during the passage of food down a part or the whole of the cesophagus.

Hemispasm of the tongue in Hysteria.

Hemispasm of the tongue may occur in connection with contracture of the muscles of one side of the face - one half of the tongue is the seat of a tonic spasm which pushes the organ to the opposite side. More rarely paralysis of the tongue occurs, the tongue lying motionless on the floor of the mouth.

Bulimia in Hysteria.

Patients affected with bulimia cannot stop eating; they constantly ask for food. Bulimia exists in hysteria and is met with among those patients who
feel weakened and depressed. Some have the mania of eating, others the mania of drinking alcohol. Many hysterical patients are polydipsical, i.e., fond of drinking many litres of water through the day. This excess of drink has an inevitable consequence; namely, an excess of urine, <u>polyuria</u>. HYSTERICAL AFFECTIONS OF THE GENITO-URINARY TRACT.

Hysterical Nephralgia.

A dull or aching pain is complained of in the Kidney region. It is doubtful how far this condition of true nephralgia exists apart from a <u>moveable</u> and <u>floating</u> Kidney and hydronephrosis. Floating kidney is extremely rare in women, especially in neurotic and hysterical women - often there is in addition greatly increased frequency of micturition.

Disorders of sexual organs.

Amenorrhoea is frequent enough in hysterical girls and women, and other menstrual irregularities also occur . A common symptom, is pain or tenderness or subjective painful sensations in the <u>ovarian</u> <u>region</u>. Tenderness in the corresponding region is also sometimes found in hysterical men. The ovarian origin of such pains is doubtful but the ovary may be tender. French authors state that <u>hysterogenic</u> zones are most frequent in the <u>ovarian</u> regions. Pains over the uterus have been described. Anaesthesia and more rarely hyperaesthesia over the labiae and in the vagina are other hysterical manifestations.

<u>Hysterical polyuria</u> occurs chiefly in men, and is accompanied by thirst, weakness, anaemia and loss of appetite. Those cases resemble diabetes insipidus with pronounced nervous symptoms. Polyuria occurs also as a <u>transitory condition</u>, and is, of course, well known in this form <u>after a fit</u>. In the diagnosis of these hysterical affections of the urinary tract, the exclusion of organic disease requires even more careful investigation than in most forms of hysteria.

Hysterical Anuria.

Instances of absolute anuria are on record. Charcot's case, in which no urine passed for eleven days, is the most celebrated. More usually there is a <u>very deficient secretion</u> of urine, amounting to only a few ounces in 24 hours. In anuria attacks of vomiting are frequent and severe. There are also profuse sweats which contain urea. It is remarkable that in such severe cases the general health remains tolerably satisfactory. The cause of hysterical anuria is by no means attributed to Vasomotor spasm of the renal vessels.

Hysterical retention of urine.

This is the <u>commonest disorder</u> due to spasm of the sphineter vesicae. It may occur alone, may accompany paraplegia, or be associated with other hysterical manifestations. This symptom is apt to recur, so be careful not to foster "catheter life" in your patients. THE DISORDERS OF MOTION AND PAROXYSMAL MANIFESTATIONS OF HYSTERIA.

We could conveniently range them into two large groups:-

(i) Phenomena of apparent <u>exaggeration of motion</u>, which seem to exceed the will of the patient and to develop inopportunely and without his consent these are the various hysterical tics, tonic and clonic spasms, tremors, choreas, contractures, etc. In the next group are:-

(ii) <u>Phenomena of Deficiency</u>, in which, on the contrary, motion seems to fail and not to obey the will and consciousness of the subject - these are the various functional paralyses - hemiplegias, paraplegias, monoplegias, aphonias, pseudoptosis, paralysis of cranial motor nerves, strabismus, hysterical facial paralysis, etc., etc.

Pathological Considerations of Hysterical Motor Disorders.

Consider

(i) The possibility of <u>simulation</u>; (ii) The anatomical <u>nature of hysterical motor lesions</u>;
 and (iii) the causes of their localisation.

The question of simulation?

Are hysterical symptoms shammed or simulated? Their sudden appearance and disappearance under emotional influences, their variability, and ofttimes their slight degree, suggest this explanation. The idea of <u>sham</u> can never be entertained in many cases. To suggest hysterical motor disorders are shammed is only to confess our ignorance, and cast an undeserved stigma upon the patient. What then is the <u>nature of the lesion</u>? There must be some histological, physiological or nutritional change, howsoever slight and evanescent, if hysterical symptoms are not shammed. We must confess our ignorance in being unable to determine such changes in spite of our modern methods of examination and research.

1. The two most striking and constant clinical features of hysterical motor disorders are:-(a) The remarkable similarity there is between them and a corresponding paralysis due to <u>organic disease;</u> and (b) the suddenness with which the paralysis (tremor or other symptom) may appear in a person with perfect normal health. It disappears suddenly without leaving behind any trace of it. The resemblance or mimicry is so great that Paget suggested the prefix "neuromimetic" should be used for all these cases, instead of hysterical. 2. The suddenness of the onset of the paresis, rigidity and tremor is another marked characteristic of hysterical cases. This <u>suddenness</u> of onset in hysterical cases is undoubtedly one of the proofs that they are due to vascular changes of some kind.

3. Hysterical motor disorders are almost entirely confined to the female sex, affecting those who are subjects of the hysterical diathesis, and are prone to arise particularly at certain age periods.

4. Every clinical variety and every degree of motor disturbance may, however, be met with in hysteria. This lesion at one time produces an <u>irritative</u> effect (rigidity or tremor) and at other times a <u>paralytic</u> effect. The extremely wide variety of these symptoms is one of their leading features.

5. The scattered distribution of the symptoms is another feature. Almost any locality might be affected. In some cases the arm on one side and the leg on the other may be involved, or there may be sensory symptoms in one part of the body and motor symptoms in another part. Intracranial lesions with scattered symptoms are always indicative of <u>syphilis</u> or <u>hysteria</u>. Savill says that the histological or physiological change in hysteria must therefore be an ubiquitous one, and capable of affecting some tissues or structure, such as the vascular system, which is found everywhere.

6. In many cases the symptoms themselves are hard to localise, and the lesion producing them difficult to locate. The lesion is not so defined as embolic or other organic lesions - this hysterical lesion is ill-defined and diffuse.

7. The sudden disappearance and completeness of the cure preclude lesions such as thrombosis, endarteritis, embolism or haemorrhage. This further proves the temporary nature of the lesion (whether it be vasoconstrictor or vaso-dilatation).

8. The incomplete degree of the paralysis is another great feature. In cases of violent tremor and even contracture, the functions of the limbs are rarely quite lost - in fact one may meet with every degree from a slight weakness to the complete paralysis. But the loss is usually slight, just as if it would ensue from a temporary vascular or nutritional disturbance.

9. The individual symptoms oscillate in degree from day to day. This paroxysmal oscillation is a feature which Savill firmly maintains, as being associated with all vasomotor disorders. 10. Practically all hysterical motor disorders are determined by some emotional state or by some shock to the nervous system. This direct causal relationship to emotional states again points strongly to a vasomotor origin.

11. Cerebral paresis, rigidity or tremor are actually initiated by a more or less transient hysterical central attack. Such disturbances of th centro-spinal vascular supply are evidenced by "swimming" in the head, or a slight syncopal or vertiginous attack, slight confusion of the mind, or transient loss of speech, etc.

Savill maintains, "hysterical motor disorders result from a sudden ischaemia or dilatation (followed by various degrees of malnutrition or exudation) involving the vessels in those parts of the central nervous system, which preside over the muscular movements affected. The vascular change may be determined by <u>emotion</u> (like other changes in the skin). It is sudden and severe, varies in area course and duration and disappears suddenly without leaving behind any apparent stigma. When the brain is involved this vascular change is probably always produced by a sudden oscillating dilatation of the splanchnic vascular area with consequent vascular disturbance in the brain. How can we account for the long <u>duration</u> of a certain number of cases, and, secondly, how can such <u>different motor effects</u> be produced by the same kind of lesion?

The duration will vary with the suddenness and severity of the vascular change, and according to its after effects. We cannot expect a sudden vascular change to occur in delicate nervous tissues and cells without more or less damage to the nutrition on the one hand, or irritation or even partial destruction on the other. The severity and duration are due to something more than mere psychic causes they are due to exudation that takes place after the manner of urticaria in the skin, angioneurotic oedema, erythema of the skin, etc. These vascular changes may damage the sufficiently delicate and susceptible centres to produce more or less permanent abeyance (paresis) or irritation (spasm) of function. The ideo-motor centres require to be re-educated after the initial change or damage to the delicate nervous tissues has passed away. Savill maintains that the severity of the initial vasomotor lesion undoubtedly accounts for some enduring motor affections. There remains in many hysterical cases a residual psychological defect in their motor memories long after the initial lesion has passed away. Re-educate these centres or stimulate them by a sudden shock, then the normal power returns and faulty contractures, etc., disappear.

Does it not occur to us how it is that one kind of lesion can produce such different effects, tremor, in one patient, tonic spasm in another. paresis in the next, and paralysis in the fourth. and sometimes all these combined in one subject? Neurologists are now agreed, that paralysis is an evidence of a complete destructive lesion of the centres involved; that rigidity is an evidence of a definitely irritative lesion, while tremer (clonic spasm) is met with when there is a partial damage, i.e., an incomplete destruction or incomplete recovery. These anatomical conditions are met with in different stages and degrees of the ischaemia, congestion, or exudation. Hence the explanation of paresis in some cases, irritative contracture due to congestion or exudation in some others, and tremor due to incomplete damage in the rest. Thus we meet with all the three kinds of motor disorders in hysteria, though the lesion (a vascular change) is the same in all.

Pathological Considerations of the "Limitation"

of Hysterical Paralyses.

Everything points to the lesion being in the spinal cord, or more often, in the <u>brain</u>. Motor (hysterical) disorders closely resemble cases due to localised gross lesions of the central nervous system in the distribution of the paralysis, spasm or other symptoms. This <u>clinical resemblance</u> is due to the fact that the <u>same anatomical parts</u> in the central nervous system are involved, only with a <u>less severe</u>, <u>more evanescent</u>, or different kind (quality) of lesion in hysterical cases. In hysteria many cases present <u>special</u> features which indicate their cerebral origin.

T. D. Savill says that: "The lesion of hyster-"ical motor disorders is certainly a <u>vascular one</u>." In hysterical motor disorders at the <u>time of onset</u> the symptoms usually indicate a more or less generalised vascular change in the brain. As time goes on, however, the lesion <u>gets localised</u> affecting some part of the motor area (e.g. arm or leg) or even some grey nucleus. Such <u>limited effects</u>, says Savill, are que to a local angioneurotic alteration in the brain (such as those seen in the skin - in erythema hysterica, etc.) <u>Savill</u> gives the following <u>contributory causes</u> which aid in determining the involvement of a <u>particular centre</u> or <u>area</u>, after the generalised vascular storm passes away.

(i) "Certain anatomical or developmental
"peculiarities of the centres involved would account
"for the fact that the grey matter and nuclei are
"prone to more lasting damage. The commonest form
"of hysterical paresis, like that due to gross vas"cular intracranial lesions, is hemiplegic in dis"tribution, and in both instances this is no doubt
"dependent on the special structure and relations of
"the 'lenticulo-striate' vascular area."

(ii) "It is only natural that previous dis-"turbance or disorder in a centre should render it "more vulnerable."

(iii) "Traumatic damage to a nerve centre may "be a contributory cause." Savill records a case in which a woman, aged 35 years, who, after a stab on the <u>left parietal</u> bone over the leg centre developed clonic spasms in the <u>right leg</u> only.

(iv) "Another possible localising factor exists
"in this and the other cases in the <u>reflected effects</u>
"on the brain or cord of a severe injury to the
"shoulder joint." B. Brodie in 1837 recorded cases
of <u>hysterical contracture</u> of a finger following a

<u>scratch</u> on that finger. Charcot recorded many cases of hysterical contracture following injuries to a joint."

(v) "It has been well known ever since the "days of Sir Benjamin Brodie that both contractures "and paresis of an hysterical may be determined by "the enforced rest attending the application of "splints or other surgical appliances." Prolonged rest probably impairs the nutrition of the ideomuscular centres of the limb involved.

(vi) "Prolonged forced functioning is also "a cause of <u>exhaustion</u> or <u>disturbed nutrition</u> of the "nervous centres."

Savill records many cases where <u>prolonged</u> <u>forced</u> functioning has undoubtedly determined the position of hysterical paralysis, contracture, or spasm. <u>Savill</u> concludes that: "Hysterical-motor "affections are caused by <u>vascular changes</u> of some "kind in the central nervous system."

There are still many able observers who hold that hysterical motor disorders are <u>entirely</u> <u>psychic</u>, <u>mental</u>, in origin. This view may explain some of the symptoms and particularly some of the later stages of these cases; but it is <u>guite in-</u> <u>adequate</u> to explain their <u>striking resemblance</u> to complex <u>organic</u> cases. It is also inadequate to explain their mode of origin in convulsive or other seizures. These seizures point most clearly to <u>disturbance</u> of the <u>cerebral circulation</u>. It is impossible to see how a complex paralysis and its associated initial symptoms can be started <u>without</u> <u>some physical</u> (nutritional or physiological or histological) change. After the initial damage has passed away these centres do not resume their functions simply for <u>want of some stimulus</u> or reeducation. As soon as one or the other or both, are applied, they recover. This is the explanation of many miracles and sudden cures.

Psychical treatment is the best for the restoration and re-education of these damaged ideomotor centres. But the <u>psychic</u> hypothesis is inadequate to explain their origin and sudden onset; it is inadequate to explain the clinical features; and it is utterly inadequate to explain many of the attendant physical (corporeal) symptoms displayed by the hysterical patients.

"Tics" of Hysteria.

These are found not only in hysterical subjects but also in those suffering from epilepsy and some other diseases. They constitute little movements of the face, head or limbs, which appear

THE STIGMATA OF HYSTERIA.

A case of so-called "Flectrical chorea"; - The head, body, and right arm were thrown into the position indi: :cated in the Figure by sudden, shock-like Muscular contractions, which were sometimes so violent as nearly to throw the patient off her balance.

(After J.M.Clarke.)



at random, without any relation either to the present circumstances or the consciousness of the These little muscular shakes may present patients. themselves in all parts of the body, especially seen in the face. They constitute grimaces of a thousand kinds, affecting the eyes, the nose, and the mouth. The patient puckers his forehead in various ways. raises or lowers his eyebrows, winks, looks sideways by starts. The nostrils tremble and close and open suddenly. Some patients move about their lips backwards and forwards and continually bite them. Tics may be related to visceral functions such as alimentation or breathing tics, and they may be seen in the limbs. The arms and legs seem to have strange habits - they rise suddenly or move backwards - the shoulders are shaken convulsively.

Hysterical "Chorea."

The first choreas that physicians decidedly connected with hysteria were the rhythmical choreas because the movements were repeated regularly at determinate intervals. These movements occur very often in a hysterical fit. The commonest is the "salute" of Charcot. The patient lying in bed, sits up, bends her body and head forwards, sometimes low enough to touch her knees, as if she were making a salute - then suddenly throws herself back Hysterical "Bowing" Movements in a Boy.

The lad placed his hands on the stomach, and then suddenly bent the upper part of his body forwards.

(After J.M.Clarke.)



till her head falls on her bed. She may "salute" twenty or forty times a minute for hours together. These have also been called "Salaam convulsions." The muscles of the back may contract causing cervical opisthotonus. These movements may be exaggerated in which the patient leaps or bounds off the ground - saltatory spasms, or chorea saltatoria. We may see these movements after a fit or after some traumatism or emotion; they come and go with great suddenness, and are sometimes accompanied by hemianaesthesia, or some other form of sensory disturbance. Remember that they are <u>unlike true choreic</u> movements since they show suddenness, regularity and rhythm.

Besides these definite movements, there are many others which have no definite name. In all such movements there is always the same rhythmical regularity. Charcot quotes Hamlet: "Though this be madness, yet there is method in it." In rare cases irregular choreas may appear in our patients hence the arrhythmic choreas may very well depend on hysteria, and the possible forms of motor agitations associated with this great neurosis. These movements may be hemiplegic in character. In some cases they appear like those of chorea minor, but have a more purposeful appearance. If the whole Contracture of left foct in a case of Hysterical chorea.

(After J.M.Clarke.)



body is affected they are very severe as even to throw the patient out of bed as we have already seen. In some cases the muscular contractions exactly resemble those which follow isolated faradic shocks. The spasms are often obscurely rhythmical in character, consisting of very rapid muscular contractions (sometimes called "electrical chorea"). The spasms in a few cases may resemble those of myoclonus multiplex. These are associated with other definite signs of hysteria. Moreover the influence of treatment aids in diagnosis. Shower baths, faradism, etc., which only aggravate ordinary chorea, rapidly cure an hysterical case. The frequent origin of chorea minor from fright or other emotional disturbances, i.e., from the same causes as produce hysterical manifestations makes it possible that chorea should occur in hysterical subjects, and the true nature of this particular group of cases of chorea, as distinguished from those of rheumatic origin (due to the Diplococcus Rheumaticus) or from those occurring in patients with strong rheumatic antecedents, is a very interesting question. All forms of hysterical tremor, choreas, rythmical spasms, and choreiform movements cease during sound sleep.

THE STIGMATA OF HYSTERIA.

A case of Hysterical "Tremor." Read the graph from left to right.

After Pierre Janet.

man

Psychological Considerations of Choreic Movements.

(i) The will of the subject has no influence on them, and the efforts of the will powerless. By making great efforts one can almost <u>disturb</u> the rythmical movements, make them less regular and so on. The movements are <u>never stopped</u>. They begin regularly when the effort of the will ceases.

(ii) <u>Consciousness</u> has no effect on this phenomenon. Very often the patient is not aware of his tics and choreas. If the eyes are shut the patient, although performing the rhythmical movements, will say that her limb is perfectly still and no longer moves.

Hysterical Tremor. (Frequency 37.5%)

Regular little oscillations, nearly continual, occur under various conditions gradually after paralytic phenomena, and very often suddenly, after an emotion. There are some varieties:-

(i) A <u>fine</u>, <u>rapid</u> tremor, like that present in <u>alcoholism</u> or in Graves' Disease (Exophthalmic goitre). It <u>persists during rest</u> and is little altered by movement and general distribution.

(ii) A <u>coarser</u>, but <u>slower</u> tremor. This may affect the limb. It is markedly increased on movement in some subjects and never increased in others. Hysterical contracture of right arm lasting many years. This contracture relaxed at times and he had violent "hysterical seizures." (Case published in Transactions of Clinical Society of London, Vol. XXII.)



It simulates that of <u>Disseminated Sclerosis</u> but (1) it continues during rest, and (2) after the object of voluntary movement has been achieved. Do not mistake hysteria for insular sclerosis in young females and vice versa.

In the paralytic form the act of standing may so increase the tremor that the patient falls, if not supported.

(iii) A third form of tremor is met with which resembles that of paralysis agitans. It persists during rest and is limited to the hand and forearm. It is not modified by movement.

In most cases there is <u>nothing behind the</u> <u>tremor</u> but a vague emotive state and a kind of transformation of the motor functions of the limb. Rarely one <u>can find</u> behind the tremors, the <u>existence</u> of a fixed idea separated from consciousness.

Hysterical Contractures (Frequency 17.8%)

The history of contractures began with the lessons of Benjamin Brodie (1837); Coulson (1851); Paget (1877); Charcot, Lasèque and Paul Richer. This history corresponds to the evolution of the greatest problems of medicine. They are very difficult to diagnose in many cases. They may come on slowly or suddenly, even after a trivial injury. The contractures may be of the hemiplegic, monoplegic HYSTERICAL CONTRACTURE of HAND.

(After J.M. Clarke.)



or paraplegic type, and may attack any group of the voluntary muscles.

The contracture affects both the flexors and extensors, but predominating in one group throws the limb into the particular posture present. In the upper limb the arm is adducted, the elbow and wrist flexed and the fingers closed so as to form a fist. In the lower limb flexion of the joints is very common, but the joints may be fixed in the position of extension. Contractures may bring about hysterical club foot (equino-varus). Fixed over extension of the great toes may occur either alone or with paraplegia. In mild cases the spasm disappears during sleep, while in advanced cases it is persistent, and forcible attempts to overcome it cause great pains. The contracture is relaxed, however, under an anaesthetic. In old standing and extreme contractures the nails are driven into the palm and the skin is ruptured (see diagram). The limbs may be hyperalgesic, may present complete or segmental anaesthesia. Some cases are attended with spasmodic and spontaneous pains. The muscles may show some wasting, but the electrical reactions are normal and the tendon-reflexes unaffected. The affected limb may be blue and cold. Hysterical contractures are apt to persist a very long time,

(After J.M.Clarke.)



and after apparent cure reappear on the slightest provocation.

In the eyes the contractures determine the spasm of the orbicularis and the occlusion of the eyelids, at the mouth they are located very often on one side and they bring on the distortion of the face.

Distinguish these from paralytic conditions, from ptosis of the eyelids which <u>fall passively</u> instead of contracting, and from <u>paralysis</u> of one side of the face. The contracture may be seated in the back, neck, or abdomen or thorax. It may bring about distortion of the spinal column and chest, and the condition may simulate many diseases of the chest. In other instances it may assume all possible forms of abdominal tumour. As regards the limbs, we have the contractures of the legs, and of the hip. These may simulate "white-swelling" of the knee, or tuberculosis of the hip-joint." In the arm beware of false luxation of the shoulder, of arthritis, and of cysts.

These diseases are among those which make the fortune of <u>religious relics</u> and <u>miraculous springs</u>. When you hear a story about a cripple with hard shrivelled legs, twisted under his body, who was rolled to the spring in a low carriage, and got up

HYSTERICAL CONTRACTURES of LOWER LIMBS.

Patient a girl of 19 years ; contractures lasted three years - they began in the left hip, and spread to both knees and the right hip. Extreme adduction of both thighs, with internal rotation. The internal rotation of the right was so great that the trochanter lay in a vertical line with the anterior superior spine.

(After J.M. Clarke.)



again, bearing away his carriage on his shoulders. you need not have the least hesitation in pronouncing the case one of hysterical contractures. Read the admirable book of Carrè de Montgeron on the miracles wrought in the cemetery of Saint Medard on the tomb of Deacon Paris, 1737. Physicians have cured such conditions, by suggestion, by persuasion. by the electric current, by magnets, by metal plates. etc. The contracture is more frequently systemic one patient always kept her feet extended in the position of Christ on the Cross. Added to this she thought she was crucified. She had cries of somnambulism and catalepsy. The contracture varies with "psychological facts.". If the patient does not think about it, it gradually decreases and unbends. Lastly, we may observe in contractures many forms of insensibility. The patient never feels the fatigue of this permanent contracture.

Multiple Contractures in Hysteria.

These forms are not very common (see diagram). According to Weir-Mitchell the <u>reflexes</u> may <u>disappeer</u> in such extreme cases. The muscles show diminished response to the <u>faradic</u>, and after years <u>even</u> to the <u>galvanic</u>, currents. The muscles harden, the fasciae and tendons undergo great thickening and become leathery or "brawn-like." Hysterical contracture causing Flexion of upper part of Trunk to the right.

(After J.M.Clarke.)



Changes in the joints occur - so that sudden recovery as one sees in the single contractures is impossible, owing to long standing adhesions and changes in the joint. Never expect abrupt recovery in old standing cases. The adhesions, thickened fasciae and tendons have got to be broken down. Contractures of the muscles of mastication may cause "Trismus," those of neck "Torticollis." The spinal muscles may get affected, producing kyphosis and lordosis; the muscles of the tongue or eyelids (blepharospasm) may exhibit contractures. Hemispasm of the face and tongue is a very important sign. The nasolabial furrow is deepened on the affected side and the tongue is protruded to the same side. The most remarkable is perhaps the phantom tumour simulating an apparently solid growth in the region of the umbilicus. The phantom tumour is due to strong contractions of the diaphragm and abdominal muscles. These phantom tumours are especially apt to occur in middle aged women about menopause and mistaken for pregnancy. It is really a condition of pseudo-cyesis, i.e., spurious pregnancy. Gowers endeavours to explain these by the following phenomena. He maintains that there is a spasmodic contraction of the diaphragm, an arching forward of the spinal column, the relaxed condition of the two recti, and the inflation of the intestine

with gas and flatus. This phantom tumour rapidly disappears when the patient is under full anaesthesia. It may be said here that major surgical operations are unjustifiable and unnecessary in all forms of hysterical affections. Tonic contractions may cease on the application of galvanism, or a circular blister round the limb, or after friction with liniments and passive extension.

The Hysterical Fit (Frequency 30.8%)

Emotional disturbances are mainly responsible for the production of "hysterical convulsions" and "fits of hysteria." but these convulsions and fits may occur through the night. The typical attack usually begins with the globus hystericus - a curious sensation as if a ball were rising in the throat, threatening to choke the sufferer. Immediately after this curious sensation is experienced, there is giddiness, cyanosis, and tachycardia. Soon after the patient may burst into a fit of crying, or of uncontrollable laughter. In other cases after the sensation of globus hystericus, the patient falls to the ground, or on some object, as the chair or sofa, and then goes into convulsions. The fall is rather gradual than sudden. The convulsions may be at first tonic - the body and legs are rigidly entended, and often times the body arches forward, producing opisthotonus. The hands are firmly clenched and the

arms are rigidly extended either at right angles to the body or close to the body. These phenomena are succeeded by movements which appear to be purposive in action. The limbs are thrown about in a wild manner, the head is dashed against the floor, and the bystanders are actually clutched at or injured. It is remarkable that if this violent struggle of the limbs and body is checked or restrained, then the struggle and fighting become more violent and aggressive. The patient may sometimes shrick, howl or groan. The eyelids are generally tightly closed, but if they are opened, the eyeballs seem to roll upwards in a rapid way. The pupils are slightly dilated and react to light, the eyeballs may be in convergent strabismus or turned up. The corneal reflex is present. The face becomes red, but by no means livid as in epilepsy. The tongue is not bitten and consciousness is never entirely lost, although the patient does not answer questions. Her actions are guided by what is said in her presence, and she automatically resists those who try to resist or restrain her movements during the fit or convulsions. The urine and faecis are not passed involuntarily. Recovery is often very rapid, but these alternations may go on for hours. The patient finally sits up and opens her eyes and looks round

wondering what she has been doing. Headache may and be present for some time afterwards, recurrent attacks are not infrequent within a few days. For other points of distinction between an hysterical and an epileptic fit see article on "Diagnosis."

One word as regards a very severe form of hysterical attack called "hystero-epilepsy," "hysteria major" or "hystero-epileptic" attack (grande hystérie) of Charcot. He made observations at the Saltpêtriére, and is regarded by him as the complete form of the hysterical fit. This condition is hardly seen in this country. It begins with various minor manifestations, and ends in a very severe fit whose chief features are described by J. M. Clarke, as follows:-

Episodes of the Full Attack of "Grande Hystérie."

1. Premonitory symptoms. Auras.

(1. Phase of tonic contraction. (a. Epileptoid (2. Phase of clonic period. contraction. (3. Phase of resol. ution. b. Period of (1. Phase of illo-2. Stages of the contortions(gical attiattack proper. and of tudes. "clownism" (2. Phase of "Grande mouvements." c. Period of passionate (emotional) attitudes. d. Period of delirium.

3. Terminal phenomena. Contractions, paralyses, etc.

Typical cases of this "hystero-epilepsy are rare in England and the United States. Hysterogenic spots so abundantly described by Richet can be marked in many cases. The spots are believed to be areas of hyperaesthesia. These hysterogenic spots of hyperaesthesia are usually symmetrical and situated over the chest, abdomen, dorsal vertebrae, the region of the ovaries, etc. After the attack is over the patient may display the most exaggerated and appalling hallucinations, such as the seeing of visions, hearing of voices, holding prolonged debates with others, etc. These hallucinations unfortunately persist, in many cases, even after complete recovery. After an attack the patient may remain for days in a state of trance or lethargy.

The Disturbances of Motion in Hysteria (Frequency 11.2%)

(The Functional Paralyses).

There is no type or form of organic paralysis which may not be simulated in hysteria. Some amount of muscular feebleness, not amounting to actual paralysis, is the commonest condition. It is as a rule only <u>paresis</u>. It affects all muscular actions and is somewhat vague and indefinite in character. It is most often met with in the legs. Definite paralysis may appear after a fit, of some violent
emotional or psychical disturbance, or of an injury. Paralysis may come on hours or days after the accident, so that there is a sort of period of incubation. A severe injury may result in severe and obstinate paralysis. An illness attended with pains in the limbs or joints, such as acute rheumatism, may be followed by hysterical paralysis. Some paralyses depend on "idea." The patient has a firm conviction that she cannot move the arm or leg. In other remarkable instances the patient is not able to perform any action without the aid of his "vision," or in other cases he loses "volitional power." In all such cases Bastian has shown that there is a loss of afferent impressions, which constitute the muscular sense, which either do not reach the cortical centres concerned in the movement, or the latter are unable to utilise them in the normal way. In a further group the paralysis may affect only one special mechanism - it may affect only one set of muscles. Thus the patient although able to skip, hop, run and jump, cannot walk. Hysterical paralyses are always brought about by very slight accidents. These paralyses are accompanied by a violent moral emotion and by disturbances of imagination. A girl aged 12 years got a serious paraplegia for 12 years for having fallen lightly on her

backside, after quarrelling with one of her girl friends. She dirtied her frock in a particularly significant part, and the consequent feeling of shame and fright gave rise to this paraplegia. Brodie, Todd, Duchenne, Russell, Reynolds, Charcot, Oppenheim, began to study what was called "traumatic neuroses." Indeed traumatic accidents are among the most frequent causes. Fatigues, frights, emotional states may bring about various hysterical paralyses. Some paralyses follow somnambulisms and crises, and affect limbs <u>formerly paralysed</u> or having in them some morbid conditions, such as rachitic formations, old scars, varices, etc.,

Characteristics of Hysterical Paralyses:-

(i) Patients quiet and unemotional - never ap-

(ii) No <u>wasting of muscles</u> except due to disuse. General muscular wasting is extremely exceptional, except in old contractures a more pronounced and limited muscular atrophy is seen.

(iii) Electrical reactions <u>are unchanged</u>, when tested both by electric and galvanic currents. In severe cases there may, however, be some diminution in response to both forms of current.

(iv) There is never reaction of degeneration.

(v) The deep reflexes are never lost. In a

few cases they are exaggerated, but rarely so exaggerated as in organic paralysis.

(vi) Frequently the paralysis is not complete there is some power of movement left.

(vii) There is, as a rule, some degree of associated anaesthesia.

(viii) The paralysis may undergo some striking alteration, may <u>suddenly disappear</u> from a trivial cause.

(ix) Distract the attention of the patient, and the socalled paralysed and useless limb may be unconsciously moved. It is most important to bear in mind that in hysterical paralysis the muscles do not atrophy.

<u>Hysterical Hemiplegia</u> may be <u>sudden</u> or gradual in onset. Most common on <u>left side</u>. Remember an important characteristic - <u>the tongue and face al-</u> <u>most always escape</u>. The face, including the orbicularis palpebrarum may escape in exceptional cases. Apparent or pseudo-paralysis of the face and tongue may,occur from <u>spasm</u> of their muscles on the opposite side to the paralysed limb, and may lead to error in diagnosis.

Hemianaesthesia is not present in all cases of hemiplegia. Hemianaesthesia may be irregular and patchy in character, and there may also be some PERSISTENT CONTRACTURES of the GREAT TOES.

When the patients have been in bed for some time the feet either drop from paralysis of the extensors or may become fixed in the position of extension by ad: :hesions.

(After J.M.Clarke,)



patches of hyperalgesia. The affected limb may be flaccid or rigid. If rigid the arm is in flexion and the leg in extension, closely simulating an organic paralysis.

Gait in Hemiplegia.

Patient may walk, but the gait is peculiar. The affected foot is not brought forward, as in an organic hemiplegia, by a movement of circumduction in which the toes scrape the floor, but is dragged along the ground after the second one, i.e., a stop is made with the sound leg and the other dragged helplessly after it.

Reflexes in Hemiplegia.

The abdominal and cremasteric are often absent; The plantar is also often absent on the paralysed side. When present the plantar reflex is of the <u>flexor</u> type. The knee jerk is often <u>exaggerated</u>, and a kind of ankle clonus is sometimes present.

Hysterical Paraplegia

(Hysterical paraplegia is more common than hysterical hemiplegia. The accident often appears when an individual is seized with an emotion while walking.

(i) Paralysis may be flaccid.

(ii) Paralysis may be rigid.

Flaccid Paraplegia.

Muscles flabby, flaccid and uncontracted. If the paralysis is complete the patient cannot stand on her legs, but if incomplete she can drag along the floor when supported on each side.

Rigid Paraplegia.

The muscles are rigid and contracted. This rigidity may not only affect the muscles of the legs, but also the muscles of the abdomen and trunk, so that the patient can be lifted up "all in one piece," <u>like the cadaver</u>. The spasm affects the flexors also; it can be overcome by firm pressure, and the muscles are <u>firm</u> and <u>well nour</u>ished. Rarely the great toes may so contract as to assume a position of extension (see diagram).

The paralysis is frequently associated with hemianaesthesia. This anaesthesia may extend to all forms of sensation. In profound anaesthesia there is also loss of the muscular sense. In hysterical paraplegia pain is generally complained of in the lumbar and sacral regions. Hysterical retention of urine is common. (Savill says it is due to the anaesthesia of the bladder). This is usually associated with hysterical aphonia. Incontinence is extremely rare. Constipation and defaecation are normal.

Reflexes.

Knee jerks are active or exaggerated, <u>never</u> <u>lost</u> except that they may be <u>difficult</u> to elicit in extreme muscular rigidity. Ankle clonus is <u>ex-</u> <u>tremely well marked</u> and may simulate that of lateral sclerosis, but remember that it is of <u>brief duration</u>, consisting of three or four movements only. The <u>plantar reflexes are often absent</u> and there is <u>never</u> <u>an extensor response of the great toes</u>.

The legs and feet may be blue and swollen ("bedeme blue" of Charcot), and bed sores are never seen.

Astasia Abasia (astasie abasie).

This is a rare form of paralysis in which only one particular movement (very often of walking) is lost. A patient with this form of paralysis may be able to move the legs freely into any position when lying in bed, or even when sitting, <u>but cannot stand</u> <u>or walk</u>. In the same way she <u>can hop but not walk</u>. The essential feature is the loss of one or more of the complex co-ordinated acts of locomotion and not of others. "Akinesia-algera" is a painful condition in some rare forms of hysteria, where every attempt to control or even move a muscle <u>causes</u> <u>great pain</u> and <u>discomfort</u>.

HYSTERICAL MONOPLEGIA.

(Dr Purves Stewart's case).

Monoplegia of left upper limb - photograph taken when symptoms had lasted nine months. The patient is attempting to elevate both shoulders in Fig.I. Fig.II shows the same patient after the administration of a general anaesthetic. The anaesthesia has completely disappeared, and the motor functions are normal.

(British Medical Journal, March 7th 1914) ...



Hysterical Monoplegia (Frequency 11.2%)

Paralysis of one limb or of a part of it may be facial, crural or brachial. The paralysis may be of the flaccid type or attended by spasmodic contraction of the muscles. In such cases there is generally anaesthesia of the affected limb, segmentary in distribution, and corresponding in extent more or less closely to the range of paralysis. Patches of hyperalgesia, angioneurotic oedema, neuralgic pains may be present in such a limb. As in hemiplegia, so in paraplegia and monoplegia, a cutaneous hemianaesthesia may be present. This hemianaesthesia may coexist with loss of sensation over the paralysed limbs or be the only defect of sensation noted. Rarely, however, in such limbs we may get atrophy of muscles and loss of electrical reactions.

In some cases the only complaint is of severe neuralgic pains; more often these are associated with excessive tenderness, and with impairment of the functions of the Joint. On examination the joint presents a normal appearance, but the Skin over it is remarkably sensitive. A light touch is more likely to excite pain than deep and firm pressure. Stiffness is a Variable feature - in some cases amounting to absolute rigidity, so that no ordinary force will elicit movement. It is characteristic of this, as of other neuroses, that the symptoms come and go without apparent cause. When the patient's attention is diverted the pain and stiffness may disappear. There is almost never any actual swelling of the joint, although there may be an appearance of this from wasting of the muscles above and below. If the joint is kept rigid for long periods, secondary contracture may occur - in the knee with flexion, in the hip with flexion and adduction - and attempts at movement may then cause cracking. Hence the important Symptoms are:-

- (i) Pain which is spontaneous,
- (ii) <u>Superficial</u> cutaneous hyperaesthesia,
- (iii) Rigidity or spasmodic contraction,
- (iv) Loss of power in the limb,
 - (v) <u>Apparent shortening</u> of the limb, owing to contracture.

(vi) No real wasting.

Hysterical Spine.

This term is applied to a functional affection of the Spine, (At present one of my patients, woman aged 27, has a marked hysterical spine), occasionally met with in neurotic females between the ages of 17-30 years, and liable to be mistaken for Pott's disease. The patient complains of pain in some part of the spine - usually the cervico-dorsal or dorso-lumbar region - and there is marked hyperaesthesia on making even gentle pressure over the spinous processes. As the patients are usually thin, the pressure of the corset is apt to redden the skin over the more prominent vertebrae, and give rise to an appearance which at first sight may be mistaken for a projection. The general condition of the patient, the freedom of movement of the spinal column, and the entire absence of rigidity, are sufficient to exclude tuberculosis. Mention should be made that in such cases there may be pain, and a zone of hyperaesthesia around the trunk - the pleuralgia of Briquet - simulating a true girdle pain.

Hysterical breast.

There is persistent pain and tenderness in one breast often attributed to a slight blow in that region; the breast is tender and the overlying skin hyperaesthetic. The skin is sometimes said to be red and discoloured, and the whole breast swollen, or small moveable swellings may be felt (Allbutt's "System of Medicine," Vol.VIII, article on Hysteria), but examination detects no local cause for the symptoms.

The chief features of hysterical joints are:-

- (i) Their occurrence usually in the female.
- (ii) Their sudden onset,
- (iii) The absence of painful startings at night,
 - (iv) Brodie's sign, i.e. the superficial stroking of the skin over the affected joint produces great pain.
 - (v) The sudden disappearance of the joint symptoms,
 - (vi) The total disappearance of rigidity under chloroform.

<u>Diagnosis</u>:- Is often a matter of considerable difficulty, and the condition is liable to be mistaken for such organic lesions as a tuberculous or pyogenic focus in the bone close to a joint, which may cause vague neuralgic pains for long periods before rupturing into the articulation. The greatest difficulty is met with in the <u>knee</u> and <u>hip</u>, where the condition may closely simulate tuberculous disease. The use of the Röntgen rays, or examination

HYSTERICAL JOINT DISORDERS.

Hysterical hip-joint disease on the left side, shewing tilting downwards of the pelvis on the right side, lumbar convexity to the right, obliteration of left gluteal fold and lengthening of the left leg.

(After T.D.Savill.)



Treatment.

The local treatment consists chiefly in improving the nutrition of the affected limb by means of <u>massage</u>, <u>exercises</u>, <u>baths</u>, and <u>electricity</u>. Splints are to be avoided. In refractory cases, considerable benefit may follow the application of <u>Corrigau's</u> <u>button</u> or the <u>actual cautery</u>. Treat the general condition on the same lines as in other neuroses. The Weir-Mitchell treatment may have to be employed in obstinate cases, the patient being secluded from her friends. Complete recovery is the rule, but when the muscles are weak and wasted from prolonged disuse, a considerable time may elapse before the limb returns to normal.

DIAGNOSIS OF INCIPIENT ORGANIC,

FROM HYSTERICAL JOINT, DISEASE.

(After T. D. Savill)

Typical incipient organic disease of hip-joint.	Typical Hysterical dis- ease of hip-joint.
Onset generally gradual; any joint may be affec- ted.	Onset usually sudden of- ten after emotion or slight injury - confined to knee and hip joints.
Pain and difficulty of walking; pain startings when asleep.	Pain: no starting pains at night.
Muscular rigidity round hip-joint; pain always produced by flexion and external rotation; rigid- ity generally remains under chloroform.	Muscular rigidity may involve the knee and ankle also; Rigidity disappears under chloroform.
Apparent lengthening at first; shortening later; muscular atrophy ensues in due course.	May be apparent lengthen- ing, but never shorten- ing.
Swelling of joint beneath femoral sooner or later.	No fulness can ever be detected.
Deep tenderness; no super- ficial hyperaesthesia; temperature over joint may be raised.	Superficial (cutaneous) hyperaesthesia (Brodie's sign).
Course always prolonged; convalescence gradual.	Recovery abrupt: may last for months or weeks or years.
Age (but not sex) may be distinctive if tubercle, loss of flesh and pyrexia with opsomic and other reactions; if rheumatic or gout other symptoms.	Sex distinctive; most young women (20-30); history of hysterical attacks; hysterical stigmata present.

AFFECTIONS OF THE SKIN IN HYSTERIA.

Historical -

<u>Dr.T. Sydenham</u> (1681) wrote thus in his "Epistolary Dissertations," "It is very remarkable that, in "many cases, a notable sensation of cold over the exter-"nal parts precedes these hysterical symptoms (namely, "Spasms like epilepsy, apoplectiform attacks, attacks "of palpitation, cough, vomiting, pain, etc.); a sensa-"tion which not infrequently lasts throughout a fit. "More than this I have found this coldness to be like a corpse." In describing an attack of globus hystericus he says: "Meanwhile, the external parts, and the mass "of flesh are so deprived of their due share of spirits "as to become cold as death - a phenomenon that occurs "in all forms of hysteria as well as this."

Dr Paul Briquet said in his "Traité clinique et therapeutique de l'Hystériae," Paris 1859, the following :- "on sait quelle puissante influence les "passions, et surtout le chagrin, les préoccupations "et la contention de l'esprit, ont sur la production "des maladies de la peau, et principalement sur celle "des acnés, de la mentagre, et des ecthymes."

<u>Professor J. M. Charcot</u> maintained that limbs which are the seat of hysterical paralysis or anaesthesias are often <u>paler</u> than, and do not bleed so readily as, those of the healthy side.

HYSTERICAL SKIN SYMPTOMS.

Angioneurotic cedema affecting one hand only.

(After Dr. Evan Evans.)



<u>Sir James Paget</u> said "The distribution of the "blood is greatly affected. Heat and cold of the same "part rapidly succeeding one another, flushing and "pallor, turgidity and collapse - all these are fre-"quent, striking and capricious in the nervous mimi-"cries (hysteria)."

The <u>Skin Symptoms in hysteria</u> are important because:-

- (i) They are very common and can be seen and felt
 by the doctor, unlike many other hysterical
 symptoms which are only subjective.
- (ii) They give a very important clue as to the true pathology of hysteria.

Savill draws the great conclusion of the <u>Path-ology</u> of hysteria from these skin manifestations. He maintains that the same Vasomotor changes which we see upon the surface of the body (as hysterical skin affections) also take place in the central nervous System, and other parts in the interior of the body.

Savill divides these hysterical skin affections into two great classes which he calls angioneuroses and toxo-angioneuroses.

ANGIONEUROSES

These are peculiar to hysteria and may be brought about by emotion. These are ischaemic and congestive conditions of the skin. These Vasomotor Skin Symptoms are peculiar to hysterical diathesis though they may occur in some other diseases. Savill has described "rapid and unexplained changes of "colour of Skin as one of the marks of hysterical dia-"thesis," in'The Lancet,'June 1st, 1901. These Vasomotor disturbances are <u>never absent in hysteria</u>, and are <u>constantly present</u>, even in Subjects having the <u>slightest hysterical diathesis</u>. These symptoms are present practically throughout life and are not due to a toxaemia of the blood.

I. ATTACKS OF PALLOR OF THE SKIN AND FLUSHING.

Even the laity call this symptom "hysterical." <u>Attacks of pallor</u>. on the surface generally accompany or alternate with the "hysterical cerebral attacks" or "the Splanchnic storms" of Savill. They are most common at puberty and the climacteric. Rarely these attacks (pallor of skin) occur without cerebral symptoms. They may alternate with flushings.

Pathology of "attacks of Pallor."

"Splanchnic Storms" are usually due to <u>emotion</u> and are common in hysteria. By "Splanchnic Storms" we mean the dilatation of the Splanchnic Vascular area. The result is anaemia of the brain or the skin, or more often of both - thus we are able to explain the "attacks of pallor" from a pathological standpoint.

Attacks of flushing,

Morbid flushing, etc., may be seen on the face, neck or any other part of the body. Savill regards these attacks of flushing as the most important of the Stigmata of the hysterical diathesis, and are one of the evidences of the Vasomotor instability, central and peripheral, which is the essence of that disease. These attacks of flushing although most common at the menopause occur throughout life from time to time, in major or minor degrees, in all subjects of the hysterical diathesis. Dr H. Campbell says:-"For me, then, a so-called flush belongs to a very "comprehensive class of nerve storm, closely allied to, "and, in fact, sometimes indistinguishable from an "epileptic or an hysterical aura, and starting like "them in a nervous level situated high up, possibly in "the highest level, the parts ('nervous arrangements') "involved being more particularly those which represent "the organic Viscera - above all, the thoracic Viscera. "The representatives of these parts in the highest "centres constitute the chief physical basis of the "emotions; and in women - in whom the emotional element "is most fully developed - they are peculiarly un-"stable and liable to explode." As a rule an emotional state is the determining cause, and this acts on the Visceral nervous apparatus in the thorax (Campbell) or in the abdomen (the Splanchnic Storms of Savill). There is a sudden oscillatory dilatation or constriction of the Splanchnic Vascular area with the result that there is deficient blood supply to the brain and constriction (Pallor of Skin) of the Surface Vessels. It is well to remember that the ilio-inguinal nerve (in the ovarian region) is intimately related with the "Solar plexus" and pallor of the Skin or flushing of the Skin can be brought about (at least in some patients) by irritating or pressing the "Ilio-inguinal nerve.."

II. ATTACKS OF EXTREMELY FUGITIVE PATCHES OF CONGES- $\underline{\text{TION}}$.

(Congestiva hysterica - Savill).

These are more or less abrupt in outline and localised to parts usually pale, such as the front or side of the neck, may often be seen in subjects of the hysterical diathesis. Savill says "while I "was percussing her chest (lady aged 32 years) two or "three patches of congestion varying in size from that "of a threepenny-piece to that of a half-crown ap-"peared suddenly on both sides of the front and back "of the chest, not raised above the surface, not fad-"ing into the surrounding skin like a blush on the "face, but terminating with an abrupt but irregular "outline like that of a map of Europe, disappearing "under pressure and passing away in a few minutes as "suddenly as they came."

The fugitive patches of congestion occur in all hysterical subjects when they are irritated or under any emotional circumstances. Their favourite site is just below the ears though they may occur elsewhere. These patches start as small threepenny bits and increase in size. They remain about ten minutes and disappear spontaneously when the patient is more at her ease and herself. Remember that these fugitive patches are valuable for diagnostic purposes - they betray any hysterical diathesis in the patient. Their chief value lies in the fact that they are <u>definite</u> and <u>visible</u> evidences of the abnormal reflex excitability of the Vasomotor centres.

III. ATTACKS OF LOCALISED ISCHAEMIA.

These attacks of localised constriction of the arterioles are recognised by many observers, and are manifestations of the hysterical diathesis.

Dr J. A. Ormerod says: - "Hysterical patients may "produce curious symptoms in the domain of the arte-"rioles and capillaries. Limbs that are paralysed or "anaesthetic may exhibit also 'ischaemia;' that is to "say, when cut or pricked they bleed less freely than "normally, or not at all. This is commonly ascribed "to a Vasomotor Spasm." The patient may describe her abnormal sensations as "weakness." "numbness" or "prickling," yet she can move the part and feel when it is touched. The skin may be of normal colour or of waxy whiteness, especially when an extremity is affected. These symptoms are more or less transient and start at the end of an extremity and spread upwards. Why do we feel justified in calling these ischaemic attacks as due to Vasomotor spasms of the arterioles? Because -

- (i) They are transient,
- (ii) The skin becomes pale,
- (iii) The part, usually a limb, is bloodless for the time being,
- (iv) They are, in almost all cases, associated with other hysterical manifestations.

<u>Case</u> - Patient aged 27 years, suffered from ischaemic attacks of hemiplegic distribution. She gives us a lucid and typical history of this neurosis (hysteria).

She was nervous and excitable as a child. She said: "All my life I have been able to flush. even when I was anaemic." As a girl her hands used to become "red," "mottled," and "swelled" in places, resembling chilblains. When the patient was 26 years these attacks became worse and were started by exactly the same causes as the globus, flushing and tachycardia. She said she felt a "numbness" or "dead feeling" (sometimes accompanied by "pricking pins and needles") on the left side. "The throat." she says. "feels "swollen, and the left half of the tongue numbed." Then she is overcome by a stupid kind of dazed feeling and she cannot speak although she is well aware of what is going on around her. These attacks last from ten to fifteen minutes followed by a very severe splitting headache. She got two or three attacks every week. During the attack the hands were pale and bloodless, and did not bleed when pricked with a needle. Remember that this patient has had hysterical symptoms of many kinds - Globus hystericus, tachycardia and syncope. In early life she had various skin symptoms of a congestive and erythematous type. Later on she got hemiplegic attacks of numbness or dead feelings. What is the meaning of all these phenomena? These were undoubtedly due to a "widespread Vasomotor spasm," starting from the

centre controlling the left arm and spreading to the centres of half of the body.

Skin lesions due to toxaemia. (Toxoangioneuroses)

These exudative and congestive skin conditions are not peculiar to hysteria but more readily seen in subjects of the hysterical diathesis than in nonhysterical subjects. Pathologically they are due to an angioneurosis combined in varying proportions with a toxaemia (blood alteration or its impurity) of some kind.

What is the nature of these toxins?

(i) Mere emotion in a case of marked angioneurosis will produce an urticaria.

(ii) Certain drugs or an overdose of them will produce urticaria.

(iii) Ptomaine poisoning or an intestinal toxin with little or no angioneurosis, may bring about an attack of any of skin conditions such as urticaria, haemorrhagic exudation into the skin, Erythematous exudations into the skin, etc.

Dermatographia.

Dermatographia is a congestive streak which appears after a few seconds in the track of a scratch on the skin with the nail or some blunt article. If an urticarial streak also appears it amounts to urticaria factitia. The common belief is that these streaks can be produced in both hysterical and nonhysterical subjects, though much more frequently and more readily in une former. The "tache cérébrale" which Trousseau described as indicative of cerebral meningitis as distinct from typhoid fever is dermatographia, and undoubtedly toxic in origin. A neuro-Vascular instability and irritability is the essential factor in the causation, either acquired as in tache cérébrale, or congenital and innate in the hysterical diathesis. To sum up "Dermatographia" is often times a pure and simple angioneurosis and sometimes an angioneurosis and a toxin acting together.

Erythromelalgia.

Paroxysmal attacks most frequently met with in hysterical females alone or associated with other diseases. These attacks cause <u>redness</u> and <u>swelling</u> of the extremities and are chronic in character. Acroparaesthesia are sensations of numbness and tingling in the extremities and are often associated with paroxysmal attacks of Erythromelalgia. Attacks of deadly white pallor of the fingers are most common in this diathesis, and are clear evidences of angiospasm (Vasomotor spasm).

. EPYTHEMA HYSTEFICA.

The flush indicated in the Sketch appeared whenever the patient was nervous or entered a room full of company. It disappeared spontaneously when she was at ease.

(After T.D. Savill.)



Erythema, urticaria, and localised oedema.

There are three degrees of dermal exudation, -

(i) <u>Serous effusion</u> - consisting of nothing but pure lymph: our typical examples are urticaria and angioneurotic oedema.

(ii) <u>Sero-Sanguineous effusion</u> - In this condition some of the blood capsules also escape from the bloodvessels, as evidenced by a certain degree of staining (e.g. Some of the erythemas).

(iii) <u>Purpuric effusion</u> - In this condition all the blood elements escape from the blood Vessels (mostly the capillaries) giving rise to such conditions as "urticaria pigmentosa" and the "purpuras"). What are these exudations due to? They are most probably due to some alteration in the blood of an auto- or hetrotoxic kind. Many a time they are dependent on other influences such as emotional and neuro-Vascular influences. Remember that these diseases are more common in the female, in direct association with other neuro-Vascular symptoms, and exhibit the same fugitive and other characteristics which hysterical phenomena do. What are the causes of these exudative skin conditions? They are:-

- (i) Nervous influences neuro-Vascular and emotional.
- (ii) Chemical changes in the blood,
- (iii) Nervous influences plus chemical changes in blood.

HYSTERICAL SKIN SYMPTOMS.

An attack of urticaria - Age of patient $8\frac{1}{2}$. Due to emotion.

(After T.D.Savill.)



The Serous Exudations :-

<u>Urticaria</u> is the best known type. This condition is as a rule due to auto-int oxications of the alimentary canal but sometimes it is due to emotional and neuro Vascular causes. Cases are on record in which <u>urticaria</u> could be produced by nervous influences such as "fixing one's mind on the subject, or by mere eye-strain, etc.

Dr H. Radeliffe Croker states in "A Treatise on Diseases of the Skin," p.128, London: H.K.Lewis, 1903:- "Everything in urticaria points to its being "primarily a Vasomotor disturbance, direct or reflex, central or peripheral." He also refers to the emotional element in urticaria, particularly in the chronic or recurrent variety; and he mentions the case of "a woman in whom the advent of strangers "produced urticaria, and this sensitiveness increased "until a knock or ring at the front door would deter-"mine an immediate outbreak."

<u>Sir Thomas McCall Anderson</u> ("Diseases of the Skin," page 268: Griffin & Co., 1894 Second edition) writes:- "In some persons mental emotion is sufficient "to call forth such as an excess of joy or grief. "Some remarkable cases of this kind have been reported "by Alibert. He once saw a young woman who could not enter a drawing room without Thaving the whole skin

HYSTEFICAL SKIN SYMPTOMS.

Fig. I. Circumscribed (angioneurotic) oedema of the eyelid. (Case of Sarah aged 35.) (After T.D.Savill.)



Fig.II. Angioneurotic oedema of eyelids in a boy aged 6 years.

(After Dr. Evan Evans.)

"covered with nettle-rash, so much so she could not "dance or enjoy any other recreation; and an eccles-"iastic who could not celebrate divine Service because "the eruption immediately came out and caused him to "scratch himself with the greatest violence."

Dr Stelwagon says:- "The action of the nervous "influence, direct or indirect, is shown in a case "(of urticaria) reported by Oliver, where the eruption "was due to eye-strain, persisting or recurring when "a change in lenses was necessary; his patient had "been the subject of recurring attacks for years, "but after suitable fitting of glasses for diminish-"ing Vision, full relief ensued; if not worn constant-"ly the eruption would return, to disappear upon "resuming their use; later the return was again per-"sistent, and was found due to Vision changes requir-"ing new lenses; on one occasion a mistake was made "by the optician, and the eruption again appeared."

Circumscribed Oedema (Giant urticaria, Quincke's disease, angioneurotic oedema).

This is another serous exudation, now regarded by many as an "angioneurosis." The attacks are due to angioneurotic or emotional causes.

<u>Case I</u>:- Woman, aged 35 years, troubled for the last nine months with "localised oedematous Swellings" of the face every three or four weeks. These Swellings were seen especially just before or just after the catamenial period. She is a very nervous and hysterical woman. These Swellings occur specially on the eyelids and face but might occur on other parts of the body. They may either vanish in a few hours or may remain for a day or two. She was given Calcium Chloride and then ammonium bromide and ichthyol. The neuro-Vascular system is chiefly to blame and the sudden onset and sudden disappearance of the lesions, without leaving a trace behind them, also support this view.

<u>Case II</u>:- Boy, aged $6\frac{1}{2}$ years: showed oedematous Swelling of his upper eyelids, which came on quite suddenly and spontaneously and disappeared just as suddenly next day. He has had similar swellings at different times across the face, in the hand, in the Scrotum. This lad showed <u>innate</u> defect in his peripheral Vasomotor apparatus, for <u>he was born with</u> <u>swollen lips</u>, and he had his <u>first attack</u> of <u>swollen</u> <u>eyelids</u> for three days when he was only <u>three months</u> <u>old</u>. When he is <u>more emotional</u> and <u>upset</u> than usual, these swellings appear. These swellings recur now and again in one part or another every week or two.

"Anatomically these swellings are due to a sudden "localised dilatation of the artery supplying the "oedematous area or a spasm of the peripheral blood "vessels or lymphatics coming from the oedema." (Savill).

alary of the second

Sydenham (1681) described Hysterical oedema and referred to hysterical swelling of the ankle, which differed, he said, from dropsical swelling by involving one ankle only, not pitting on pressure, and being greatest in the morning instead of in the evening. Benjamin Brodie (certain local nervous affections) in 1837, refers to the diffuse pale swelling of a limb which may follow prolonged hysterical pain in the part. Professor J. M. Charcot ("Lecons cliniques des Maladies du Système nerveux," t.I, pp.110-120, Paris 1892), in addition to the "oedème blanc des hystériques," gave a very lucid description of a congestive form of hysterical oedema (Called "oedema bleu") in which the swollen parts were cyanosed, cold, and exhibited scattered spots of red.

<u>Paul Richer</u> ("Nouvelle Iconographie de la Salpêtrière," Vol.II, pJ17) describes "Swelling of the neck" in hysterical subjects.

<u>Gilles de la Tourette</u> and <u>Dutil</u> include hysterical swelling of the hand and other parts among the "trophic" troubles of hysteria.

HYSTERICAL SKIN SYMPTOMS.

Woman aged 22 years; Erythema gyratum on forearm. When she is "upset" or nervous she shows this con: :dition.

(After T.D.Savill.)



Sero-Sanguineous exudations in Hysteria.

The best type of this disorder is met with among young hysterical women as "Erythema nodosum." Remember that in young hystericals we often meet with two conditions -

(i) Erythema nodosum, and

(ii) Erythema pernio (chilblains).

Both these conditions (the hysteria and the erythema) are indications of the morbid instability of the neuro-Vascular centres. Other angioneurotic or neurotoxic conditions may bring about Erythema multiforme, erythema annulare, erythema iris, erythema marginatum, erythema gyratum, and even erythema Vesiculosum and erythema bullosum, (Vide Dr Stelwagon, "Diseases of Skin," p.148: London), (Mr Malcolm Morris, "Diseases of Skin," p.102: London).

Haemorrhagic or Sanguineous exudations.

Spontaneous haemorrhages may occur from the ears, nose, or other mucus surfaces, as part of an hysterical seizure. Gilles de la Tourette (Nouvelle Iconographie de la Salpêtrière) has described <u>Subcutaneous haemorrhages</u>. Dr Putman (New York Medical Journal, July 4th, 1903, p.26) has described a case of "black chromidrosis with hysterical paralysis." The <u>taches</u> and spontaneous haemorrhages in
HYSTERICAL SKIN SYMPTOMS.

Case of urticaria pigmentosa.



(After T.D.Savill.)

the religious Votaries of the Middle Ages were most probably examples of hysterical haemorrhage. Concluding Remarks.

Briquet says: - "Many eruptions are modified by "the emotional states incidental to the hysterical con-"stitution. In all the skin symptoms the Vasomotor "instability plays a very prominent part.

Pathology of the Skin Symptoms (Summary)

- (i) Generalised <u>pallor</u> and <u>flushings</u> are due to slight degrees of "Splanchnic Storms."
- (ii) <u>Congestive patches</u> and <u>ischaemic attacks</u> met with in hysteria are visible evidences of the reflex excitability of the local Vasomotor mechanism.
- (iii) Dermatographia, Erythromelalgia, urticaria, circumscribed oedema, Erythematous exudations, and Haemorrhagic exudations into the skin are due to reflex excitability of the local Vasomotor mechanism, plus toxic blood changes.

Remember what we have so often said, that similar changes occur in the nervous system and the internal organs as are evidenced on the skin.

Firstly, we have now learnt that Vasomotor instability, with or without toxaemia, can produce, in an hysterical subject, lesions <u>not only</u> in the skin <u>but also</u> in the brain and internal organs. Pallor, flushing, congestion, ischaemia, exudation and haemorrhages, seen on the skin, may also occur in the central nervous system and other places, and give rise to hysterical motor, sensory, Visceral and other Symptoms. Sydenham made the important statement that: "Whatever part of the body it (hysteria) "attacks, it will create the proper symptom of that "part . . Few of the maladies of miserable "mortality are not imitated by it."

<u>Secondly</u>, slighter and more transient pallor and congestions, are often overlooked, and are not sufficiently recognised by the general practitioner as part and parcel of the hysterical diathesis.

<u>Thirdly</u>, these Vasomotor changes may undoubtedly occur in all organs or tissues. The most marked effects however occur in the skin and in the central nervous system, as the skin and the central nervous system have marked resemblances - <u>embryonic</u>, <u>physio</u>-<u>logical</u>, and <u>pathological</u>. What is the embryological resemblance? Remember that it is from the <u>epiblast</u> that both the integumentary covering of the body and the central nervous system are developed. The central nervous system is formed solely by an infolding of the epiblast; the rest of the epiblast forms the skin. These are the only two structures of the body which are developed from the epiblast.

What is the physiological resemblance? It is to be found in the fact that just as the skin with its tactile corpuscles, the eyes and other external organs represent the <u>external</u> projection of the Sensorium, so does the central nervous system represent the <u>internal</u> projection of the Sensorium.

What is the pathological resemblance? Take the disease Syphilis. It is apt to affect especially the skin and the central nervous system. Thus we are justified in holding the view that "hysterical" lesions (Vasomotor, with or without toxaemia) which we have examined in the skin may also occur in various parts of the central nervous system and may produce many disorders. These Vasomotor changes in the skin may not cause the patient any great trouble or annoyance but such changes cause profound disorders and bring about obscure symptoms when they affect the delicate and sensitive central nervous System (which includes the brain, spinal cord, Sympathetic nervous system, or peripheral nerves.)

NUTRITION AND METABOLISM IN HYSTERIA.

Gilles de la Tourette and Cathelineau (Traité clinique et Therapeutique de l'Hystérie. Paris 1891. Vol.I. chap.XII) showed that in hysteria, apart from paroxysmal manifestations. the nutritive processes are normally carried on. While remembering that the general nutrition of the hysterical is very satisfactory one must always bear in mind that hysteria frequently occurs in persons who are thin, anaemic. and debilitated as the result of acute or chronic illness, or of over-work and insufficient food. Do not attribute the nutritional defects in such cases to the hysterical manifestations. It has been proved that manifestations of hysteria in well nourished subjects, do not disturb the normal nutrition. They may remain in good condition with a long standing paralysis or hysterical contracture. But manifestations of hysteria due to gastro-intestinal disorders have been known to disturb nutrition even in the healthy.

Gilles de la Tourette and Cathelineau found that during an hysterical fit or other paroxysmal manifestation the <u>total solids</u> of the urine including the urea and phosphates are <u>small</u> in amount, and that in the following 24 hours the ratio of the earthy to the alkaline phosphates, instead of the normal 1 to 3, becomes 1 to 2, or even 2 to 1. Other observers maintain that this important observation, although true of hysteria is not absolutely peculiar to it, but is found in other diseases of the nervous system. We may summarise the above statements by saying that in the ordinary forms of hysteria the urine shows no qualitative or quantitative changes but in the severer types characterised by convulsions, etc., Remember these modifications:-

- (i) Reduction in urates,
- (ii) Reduction in phosphates,
- (iii) The urine reduced in amount,
 - (iv) The ratio of the earthy to the alkaline phosphates, normally 1-3 is 1-2 or even 2-1.

"Fever" in Hysteria.

In the vast majority of cases of hysteria there is no fever. A rise of temperature, however, whether directly due to hysteria itself or not, does undoubtedly occur occasionally in hysterical persons, accompanying undoubted hysterical manifestations. The presence of fever after a series of convulsions can no longer be held to exclude their hysterical nature as in some cases of status epilepticus the temperature is raised, - for pyrexia has been found after repeated hysterical seizures.

We may have three groups of cases :-

(i) Cases in which <u>Fever</u> is the only and sole manifestation. These cases are very rare indeed. These are generally <u>chronic</u> cases in which only this symptom of pyrexia occurs and nothing more, - so that we have to diagnose "hysterical fever" in such cases. In one case the patient had an afternoon rise of temperature for four or five days. This temperature was generally between 101.5 F. and 103[°] F. The young woman was well nourished, and presented no other marked hysterical stigmata beyond a form of the characteristic sighing hysterical respirations. There was a clear neurotic family history.

(ii) Cases of hysterical fever with spurious or pseudo <u>local</u> manifestations. These are most difficult to diagnose. The patient may have a sudden rise of temperature in various regions and pain. It might look like a case of meningitis as there may be pain in the head and back, contracted pupils, retraction of neck, vomiting, etc., Remember these symptoms may go on for months. There is a condition known as <u>pseudophthisis</u> (pseudo-tuberculosis) in which the patient has spurious haemoptysis with blood stained mucous, slight fever, some degree of emaciation and pains in the chest. In such cases do not rush to the hasty diagnosis of "early pulmonary tuberculosis." Pseudoperitonitis (hysterical peritonitis) may follow an attack of fever. (iii) <u>Hysterical hyperpyrexia</u> - In rare cases the temperature may go as high as 110° F. or 120° F. The general symptoms in such cases are often slight, and bear no relation to the high temperature. In one case recently reported, a temperature of 112° occurred with a pulse of 90. Hysterical delirium is a not infrequent accompaniment of such cases.

In any case where pyrexia seems to be of hysterical origin great care should be taken to guard against fraud.

THE MENTAL STATE IN HYSTERIA.

The traditional account depicts the hysterical person as one of variable and unaccountable moods, unstable in character, given to violent emotions, and to lying, deceit, and dissimulation. This statement is inaccurate, and is based on a misconception of the disease. There is no such pathognomonic mental condition, and hysterical patients vary greatly in the mental attitude and behaviour. The character of the physical symptoms present has an influence upon the psychical ones. Yet allowing for great variation in the mental habit of different patients, it is true that in the majority of patients hysteria shows certain mental attributes and traits of character.

Loss of control or of regulation by the highest psychical centres is most important, showing itself in a strange <u>variability of temper</u>, in <u>loss</u> <u>of control</u> over the emotions, and in a want of stability to carry out a definite purpose. Everything is carried to an extreme in such patients. The emotional unrest is shown sometimes in the positive form, in unnatural excitement; sometimes in the negative, in equally unreasonable depression.

The greatest symptom that strikes the medical

man is the <u>lack of concern</u> so frequently displayed at some apparently grave disability (such as paraplegia, hemiplegia, hemianaesthesia, etc.). This lack of interest is not uncommon, though not so frequent as the one in which absence of interest in the surroundings is the consequence of selfconcentration.

From another point of view the hysterical patient is extremely sensitive to anything in her surroundings which bear directly or indirectly upon <u>her own symptoms</u>. This readiness to be influenced in various directions is no doubt one cause of the variations so <u>often</u> shown in the course of the disease; not only is the hysteric open to suggestion from <u>without</u>, but also to those from within the body, (auto-suggestion). Many writers have proved that in hysteria the <u>memory</u> is peculiarly <u>defective</u>, taking the form of amnesia, may be for long past events or recent events. Such a loss is only temporary, not permanent.

What then are the "Mental Stigmata" of Hysteria?

Under the influence of Charcot and his school, one symptom, i.e., anaesthesia, has become the pre-eminent stigma. The anaesthesia is not easy to recognise, and it has very delicate psychological characteristics. It is very mobile and very

impressionable. How could this important symptom be explained? Is it possible to explain it on physical methods, or does it depend on the "mind"? Scientists have long felt that there was a hysterical mental state. Tardieu says: "A common feature "characterises them, namely, instinctive simulation. "the inveterate and incessant need of unceasing "lying, without reason, solely for the sake of lying, "and this not only in words, but also in action, by "a kind of parade in which the imagination plays the "principal part, gives birth to the most inconceiv-"able incidents and sometimes proceeds to the most "disastrous extremities." So falsehood becomes another stigma of hysteria. Falsehood is one of the mental accidents of this great neurosis, but its frequency has been much exaggerated. The next great mental stigma is the phenomenon of suggestion. Suggestion (Babinski laid great stress on this) is one of the most fundamental stigmata of the hysterical state. By suggestion you cause any idea whatever to penetrate into the mind of the subject through any means you please, through sensations, signs, and especially speech. There must be an idea. In suggestible individuals this idea seems to be transformed and to become at once another psychological phenomenon, an act or a perception.

Another important characteristic of suggestion will manifest itself in the visceral domain. An essential trait is that these patients make their thoughts penetrate into their viscera. The idea of vomiting brings about real vomiting, an imaginary purge with pure water brings about a real diarrhoea. In suggestion each idea seems to develop to the maximum, to give all it contains in the way of images, muscular movements, and visceral phenomena. Suggestion has two great characteristics: (i) It is a complete development; (ii) It is a development independent of certain ideas. Certain minds do not retain images of their sensations and, above all, they no longer keep up the systematization of these images. They are incapable of calling them up and arranging them in a series; they are therefore not suggestible subjects. Some patients are not suggestible because they are below suggestion as the first condition of suggestion is a certain strength of mind. Suggestibility does not hold good during all the life of the hysterical. This symptom only reappears in a state of depression, together with all other accidents. Suggestion is a precise and relatively rare phenomenon; it presents itself experimentally or accidentally only with hystericals, and, inversely almost all hystericals present this phenomenon in a higher or lower degree.

Another very singular disposition of mind, for which we have not a clear expression, is "exaggerated absent-mindedness" (disposition to indifference). This abstraction exists in hysteria in an astonishing degree. These patients appear to see one thing at a time, and they have no notion of another object, though it be very near the first. When they speak to one person they <u>forget</u> that there are others in the room. Objections, impossibilities, contradictions, do not reach their minds in the least.

The same limitation was observed in their movements. They can perform but one action at a time. The first indication you perceive of a <u>mental</u> disturbance is their incapacity to do more than one thing at a time.

The exaggeration of this disposition will bring about the phenomena of <u>subconsciousness</u> . . . a great many things will exist outside the personal consciousness. This special "absent-mindedness" is a stigma <u>peculiar to hysteria</u>, and does not exist in the normal individual.

Another great mental stigma of hysteria is the phenomenon of <u>transfers</u> and <u>equivalences</u>. During 1875 - 1890, this phenomenon which is called "transfer" was very much sought after, and became a convenient therapeutic process in which magnets and mental plates, and sometimes electricity, was used. It is a particular application of a disposition which is very general with the hysterical. and of which a thousand other applications are to be observed; namely the disposition to equivalences. Hysteria is a very singular malady, the cure of which one never dares assert. It is often easy through some psychological process, or some suitable therapeutic process to cause such and such a determinate accident to disappear. These accidents may disappear of themselves, without any reason for so doing, owing to some emotion, etc. But the same accident is very likely to soon reappear, or another apparently quite different accident takes the place of the first. Singular alternation between disturbances of the stomach and deliriums is one of those that is oftenest observed. A patient may have contractures in her limbs, and when the contractures disappear, mental disturbances appear. It has been observed that hysterical coughing may alternate with crises of sleep, or aphonia might alternate with gastric accidents, or the contractures of the body may alternate with the phenomena of amaurosis, and so on indefinitely.

No doubt, in many diseases of the <u>mind</u>, we observe instability. But this quite <u>special</u> form of instability which replaces one accident by another, apparently quite different, and that suddenly and clearly, is, again, very characteristic of the hysterical diathesis.

P. Janet calles this <u>mental</u> state in hysteria as "Retraction of the field of consciousness." The essential and certain thing is that this extent of the field of consciousness varies very much with individuals and their states of mind. The great moral stigma, "suggestibility in the hysterical" already shows the isolation of the ideal. According to Janet, hystericals present: "A depression, a lowering of "the mental level, which takes the special form of a "retraction of the field of consciousness."

Among the records of some five hundred hysterical cases, T. D. Savill finds the following mental conditions in hysteria:-

- 1. Catalepsy (13 out of 500 cases).
- 2. Ecstasy (2 out of 500 cases).
- 3. Delirium and Mania (11 out of 500 cases).
- Lethargy, trance, sleep, or somnambulism
 (9 out of 500 cases).
- Loss of memory, double personalities, etc., (45 out of 500 cases).

With the exception of the first condition (catalepsy), they are not necessarily associated with any bodily symptom. All these conditions <u>are chronic</u> and enduring, though they very frequently present the same features of <u>sudden onset</u> and <u>disappearance</u>. CATALEPTIC CONDITION in a case of HYSTERICAL SLEEP.

Illustration of a girl who was in a state of Hysterical Sleep for nearly three weeks. The arms remained in this position for an hour and a half.

(After J.M. Clarke.)



Catalepsy (Frequency 13 out of 500 cases).

This pehnomenon is seen in hysteria. It sometimes accompanies or succeeds the fits, in which case the different cataleptic attitudes are assumed under the influence of hallucinations. It may, however, occasionally occur apart from convulsive attacks as the primary and dormant symptom. In such cases the cataleptic condition may come on quite suddenly, often after slight prodromnal symptoms of headache, faintness, etc., in the midst of some ordinary action. The muscles become rigid, and the patient is suddenly arrested in the middle of an action and remains statue-like, with rigid muscles, for a variable time. If passive movements of the patient's body or limbs are attempted, it will be found that considerable force is required to overcome the rigidity of the muscles. The whole body is usually involved, and after the rigidity passes off, we get the condition of "flexibilitas cerea" in which the limbs can be passively moved into any position, even the most unnatural, awkward, or constrained, and remain in this posture until the effect of fatigue and the action of gravity causes them gradually to fall into one of rest (see diagrams). Catalepsy is often accompanied in hysteria with disorders of sensations. Besides forming a

CATALEPTIC CONDITION in a case of HYSTERICAL SLEEP.

Illustration of a girl who was in a state of Hysterical Sleep for nearly three weeks. The right arm has gradual: :ly dropped and the left arm has become tremulous.

(After J.M.Clarke.)



part of hysteria, catalepsy may occur after weakening illnesses in those who are presumably not subjects of hysteria, in some mental affections, and occasionally in meningitis and apoplectic coma. It may form a part of induced hypnotism. The pulse and respiration are usually not affected in catalepsy - the patients while in this condition appear more or less unconscious of their surroundings, and insensible to stimulation.

Narcolepsy.

Is the occurrence of short attacks of sleep, beginning suddenly, lasting a few minutes to one or two hours, and ceasing suddenly, is seen in hysteria, and some other diseases (epilepsy, neurasthenia, etc.)

Trance or Lethargy (Frequency 9 out of 500 cases).

This very curious condition has been known from the ancient times and forms the foundation of many of the stories in which a person has nerrowly escaped being buried alive. Trance is the result of hysteria, or of exhausting illnesses, or of hypnotism. In these attacks the patient passes into a condition of deep sleep, and may remain so for days, weeks or months. The onset varies. (i) Very frequently the attack succeeds a fit, the patient passing into the lethargic state after one of the stages of the paroxysm; (ii) The patient suddenly falls into sleep during the performance of some ordinary action; and (iii) The patient passes out of a natural into a hysterical sleep.

The attacks vary very much in severity; thus some patients can be easily aroused by calling loudly to them, shaking or pricking them; in others, the stimulus must be more intense and be applied for a prolonged period before any effect is produced; and in most severe cases they cannot be roused at all.

When the patient can be roused, the stimulus is often only effectual for a short time.

In attacks of moderate severity the appearance is as of one in a quiet, deep sleep. In more severe cases of longer duration the face is pale, and there is emaciation from defective nutrition. It is rare for consciousness to be completely lost, although the patient cannot speak and makes no signs. The degree of lethargy varies very considerably, and the patient may suddenly burst out laughing or crying, or may show some sign of consciousness. As in natural sleep, the patients may from time to time change the position of the body or limbs, and if the bedclothes are pulled off the body, they may draw them back again. In the midst of profound lethargy she may wake up for a few minutes or hours and eat a hearty meal, and then again pass into the condition of profound trance for days and weeks.

The eyes are closed, and the eyelids resist attempts to open them: the eyelids may show a quivering movement. The pupils are moderately contracted or dilated, and react to light. The conjunctival reflex may be present or absent. The pulse is small, the heart sounds are feeble or inaudible, and the breathing is extremely quiet, so that occasionally the patient has been thought to be dead. It is said sometimes to take on the Cheyne-Stokes rhythm.

The tendon reflexes and the abdominal reflex are present but, the plantar reflexes are usually absent. The body and limbs may be rigid in some cases, whereas in others the muscles may be in a condition of relaxation. The muscles of the jaw are generally contracted, and tonic and clonic contractions have been noticed in other parts of the body. The spasm of the muscles of mastication is often a great source of difficulty in feeding the patients.

In some cases of trance the cataleptic state (flexibilitas cerea) is present, i.e., if the limb is placed in a new position it remains so for a long time.

In severe attacks of sleep of long duration the urine and faeces are passed into the bed unconsciously. The temperature, in mild cases, is normal; in severe attacks it is subnormal. In long standing attacks thenutrition of the body is lost, the patients become emaciated and feeble. Gilles de la Tourette and Cathelineau found that during these paroxysmal manifestations of hysteria the total solids of the urine, including urea and phosphates, are small in amount (see chapter on Metabolism).

The attack may end by a hysterical fit, after which the patient recovers; more commonly they wake up as if from a natural sleep. This recovery is gradual. The duration of the attack may be from hours to days, or even weeks and months in severe cases. After the attacks, if prolonged and severe, the patients are weak and languid. In a great majority of cases there is no remembrance of what has taken place during the attack; in others there is, however, a partial memory of some events. Most cases recover.

Somnambulism (Frequency 9 out of 500 cases).

Somnambulism may follow hysterical fits, or attacks of sleep, or be induced by hypnotism (artificial somnambulism). In the majority of cases the patients are not in full possession of their mental powers during the attack, but the <u>mental</u> change may be exceedingly <u>slight</u>, so as only to be recognisable by their intimate friends. Such conditions show <u>all gradations</u> to the more highly-developed states of double-consciousness, in which the patient lives a dual existence, and the <u>mental life</u> is <u>divided</u> into two <u>psychical states</u>, carried on independently of each other. The mental acquirements, the moral character, the behaviour in the ordinary business of life and social relations are often entirely different in the two states. When in one state the patient has no knowledge of the events of the other: the second existence thus lies outside the ordinary psychical content and is foreign to it.

P. Janet calls somnambulism: "the most typical "and the most characteristic symptom of hysteria, a "<u>moral</u> symptom." The somnambulist is a person who thinks and acts in an odd way and that person looks <u>asleep</u>. <u>Shakespeare</u> gives the most beautiful description of the popular conception of <u>somnambulism</u> in "Macbeth."

<u>Doctor</u>. I have two nights watched with you, but can perceive no truth in your report. When was it she last walked?

Gentlewoman. Since his majesty went into the field, I have seen her rise from her bed, throw her nightgown upon her, unlock her closet, take forth paper, fold it, write upon 't, read it, afterwards seal it, and again return to bed; yet all this while in a most fast sleep.

<u>Doctor</u>. A great perturbation in nature, to receive at once the benefit of sleep and do the effects of watching! In this slumbery agitation, besides her walking and other actual performances, what at any time have you heard her say?

<u>Gentlewoman</u>. That, sir, which I will not report after her.

Doctor. You may to me, and 't is most meet you should.

Gentlewoman. Neither to you nor any one, having no witness to confirm my speech.

Enter LADY MACBETH, with a taper. Lo you, here she comes! This is her very guise, and, upon my life, fast asleep! Observe her; stand close.

Doctor. How came she by that light?

<u>Gentlewoman</u>. Why, it stood by her; she has light by her continually, 't is her command.

Doctor. You see, her eyes are open.

Gentlewoman. Ay, but their sense is shut.

Doctor. What is it she does now? Look, how she rubs her hands.

Gentlewoman. It is an accustomed action with her,

to seem thus washing her hands; I have known her continue in this a quarter of an hour. <u>Lady Macbeth</u>. Yet here's a spot. <u>Doctor</u>. Hark! she speaks; I will set down what comes from her, to satisfy my remembrance the more strongly.

Lady Macbeth. Out, damned spot! cut, I say! - One, two; why, then 't is time to do 't. - Hell is murky!-Fie, my lord, fie! a soldier, and afeard? What need we fear who knows it, when none can call our power to account? - Yet who would have thought the old man to have had so much blocd in him?

Doctor. Do you mark that?

Lady Macbeth. The thane of Fife had a wife; where is she now? - What, will these hands ne'er be clean? -No more c' that, my lord, no more o' that; you mar all with this starting.

Dector. Go to, go to; you have known what you should not.

<u>Gentlewoman</u>. She has spoke what she should not, I am sure of that; heaven knows what she has known. <u>Lady Macbeth</u>. Here's the <u>smell</u> of the <u>blood still</u>; all the <u>perfumes of Arabia will not sweeten this</u> <u>little hand</u>. Oh, oh, oh!

Doctor. What a sigh is there! The heart is sorely charged.

<u>Gentlewoman</u>. I would not have such a heart in my bosom for the dignity of the whole body.

Doctor. Well, well, well, -

Gentlewoman. Pray God it be, sir.

<u>Doctor</u>. This disease is beyond my practice; yet I have known those which have walked in their sleep who have died holily in their beds.

Lady Macbeth. Wash your hands, put on your nightyet gown; lock not so pale. - I tell you again, Banque's buried; he cannot come out on 's grave.

Doctor. Even so?

Lady Macbeth. To bed, to bed: there's knocking at the gate; come, come, come, come, give me your hand. What's done cannot be undone. To bed, to bed, to bed: (Exit).

Doctor. Will she go now to bed?

Gent]ewoman. Direct]y.

<u>Doctor</u>. Foul whisperings are abroad. Unnatural deeds Do breed unnatural troubles; infected minds To their deaf pillows will discharge their secrets. <u>More needs she the divine than the physician</u>. -<u>God. God forgive us all</u>: - Lock after her; <u>Remove from her the means of all annoyance</u>, And still keep eyes upon her. So, good night; My mind she has <u>mated</u>, and <u>amaz'd my sight</u>. I think, but dare not speak.

Gentlewoman.

Good night, good doctor.

(Exeunt).

There is a very important period; it is the moment when somnambulism begins, the change from the normal to the second state. When the change is sudden there is a loss of consciousness, a half faint. When the change is slow, voluntary activity and close application seem to disappear, to give place to the dream (somnambulism).

Endeavour to learn what images fill his consciousness. Notice that he sees the objects he speaks of, and really hears, feels, touches them exactly as if they were real. When the patient speaks, he has a fluency of elocution, and even an eloquence that seems superior to his normal powers, because he gives himself entirely up to the idea he means to express. When he acts, he acts with the precision and quickness of an actor. The development of the somnambulic delirium is not only intense but perfectly regular. In contrast with the brilliant unfolding of some phenomena, there are strange mental blanks. These patients seem unable to grasp anything else. They never answer when you speak to them, and the objects which you may thrust before their eyes do not in the least alter their dream, and do not stop it; as the doctor remarks in the case of Lady Macbeth, their eyes seem open but they are shut to all impressions that are not

connected with their dream. As the patient perceives nothing except the idea he is possessed of. he remembers nothing except that one idea. When the patient recovers he resumes his former sensations, and he is to all intents and purposes a different being. If you try to awaken him by direct questions, either of two things may happen. You will either revive his memory so vividly that he will fall back again into the preceding state, or you may be unable to recall to his mind the lost memory. What is the psychology of somnambulism? During the crisis itself, two opposite characteristics manifest themselves; first, a huge unfolding of all the phenomena connected with a certain delirium; second, an absence of every sensation and every memory that is not connected with the delirium. After the crisis during the state that appears as normal, two other characteristics appear, opposite, to all appearance: the return of consciousness of sensations and normal memory, and the entire forgetfulness of all that is connected with the somnambulism.

Double Personalities.

Somnambulisms present in a few cases a new metamorphosis, whose scientific interest is very great when they are so protracted and complicated as to give rise to double existences, dual personalities.

A celebrated neurologist of New York - M. Dana - published in 1894 in the Psychological Review, p. 570, a comprehensive study on the most definite cases which have been observed, and he counted only sixteen. Dr Morton Prince (Journal of Abnormal Psychology, p. 186), gave a fine table of twenty cases, of which he explained the most interesting features.

The type of double existences is given us by a celebrated case, more legendary than historical, published in 1831, in a work of Dr MacNish, entitled "Philosophy of sleep." The following is the abridged history of her who is called the "Lady of MacNish."

"A well-informed, well-bred young lady of a "good constitution was <u>suddenly seized</u>, without pre-"vious warning, with a profound sleep, which lasted "several hours longer than usual. On awaking, she "had forgotten all she knew; her memory was like a "tabula rasa, and had preserved no notion either of "words or of things; it was necessary to teach her "everything anew. Thus she was obliged to learn again "reading, writing, ciphering. Little by little she "became familiarized with the persons and things sur-"rounding her, which were for her as if she saw them

THE STIGMATA OF HYSTERIA.

This is a case of "Retrograde amnesia." Horizontal Line = Different periods of the course of life. Vertical Line Represents the same periods as remembrance.



"for the first time. Her progress was rapid. After "a rather long time she was, without any known cause. "seized with a sleep similar to that which had pre-"ceded her new life. On awaking, she found herself "exactly in the same state in which she was before "her first sleep. But she had no remembrance of any-"thing that had passed during the interval. In a "word, in the old state she was ignorant of the new "state. It was thus that she called her two lives. "which were continued separately and alternatively "through remembrance. During more than four years "this young lady presented these phenomena almost "periodically. In one state or in the other, she "did not remember her dcuble character, any more than "two distinct persons remember their respective na-"tures; for instance, in the periods of her old "state, she possessed all the knowledge she acquired "in her childhood and youth; in her new state, she "knew only what she had learned during her first "sleep. If a person was presented to her in one of "these states, she did not know this person in the "other state, but was obliged to study and know him "in both to have a thorough notion of him. And it "was the same with everything. In her old state she "had a very fine handwriting, the one she had always "had, while in her new state her handwriting was bad,



2

Note the "continuous amnesia" for several years.





Modifications of "Memory" in a case of Hysteria; the subdivisions in the figure represent the several years. "awkward, as it were, childish, because she had "neither the time nor the means to perfect it. As "has been said above, this succession of phenomena "<u>lasted four years</u>, and Mrs X. was accustomed to it, "and had succeeded easily in maintaining an inter-"course with her family."*

P. Janet has given the following useful Schemata to represent the "disturbances of memory." There are, indeed, in a resemblance or in an oblivion two different things which must be represented simultaneously. We must first consider the time when the remembrance exists: for instance, it is to-day that I remember the studies on double consciousness; this is the date of the appearance of the remembrance. We must also consider in a remembrance the last period to which it refers. To represent these two things simultaneously, Janet proposes the following schemata (examine the diagrams).

The horizontal line O X from left to right, designates the different periods of the course of life in their order of appearance. It is on this line the remembrances at the moment of their appearance are inscribed. The vertical line O Y,

* In connection with this case, see Azam, "Les altérations de la personalité, in <u>Revue scientifique</u>, 1883, IL p.616, and <u>id.</u>, "Hypnotisme et double conscience," 1893, p. 136.

THE STIGMATA OF HYSTERIA.

A case of "Reciprocal Somnambulism."

Horizontal Line = Different periods of the course of life. Vertical Line = Represents the same periods as remembrance.



After Pierre Janet.

from the bottom to the top, represents the same periods, but as remembrance, as representation. At each point of the horizontal line a perpendicular parallel to the vertical line which represents the remembrances is drawn; its height represents the number of remembrances one possesses at such or such a moment.

In the singular history of the "Lady of MacNish" the <u>oblivions</u> and remembrances alternate in the same way very regularly. In the state called state No. 1, the "Lady of MacNish" does not remember the state No. 2 at all; in the state No. 2 she does not remember the state No. 1, at all. When she comes back to the state No. 1, she remembers only this state and nothing more. It is the same when she comes back to the state No. 2. There is in the disease a perfect alternation which the schema illustrates very well, and which is quite peculiar to this type of patients.

Dr Weir Mitchell in the Transactions of the College of Physicians of Philadelphia, April 4, 1888, gives a remarkable case of "double consciousness" - the patient being Mary Reynolds - a nervous girl of eighteen years. This young lady who without warning fell into a sound sleep for some hours, and on awaking was found to have lost all memory for DOUBLE PERSONALITIES OF HYSTERIA.

A case of "Dominating Somnumbulism.".

The oblivious (black squares) and remembrances (white squares) alternate with regilarity and mythm.



After Pierre Janet.
reading, writing, and cyphering, and of persons and things about her. This knowledge she had to acquire laboriously again; but sometime later she again fell asleep, and woke to find herself in her original condition or first state, with complete ignorance of what had occurred in her new, or second state. Later again she relapsed into this new state, knowing then only so much as she had learned on the previous occasion. And so for <u>some years</u> she changed from state to state; the life of the first, third, and fifth periods was continuous but different from the continuous life of the second, fourth and sixth periods, and she had in the <u>one personality no memory</u> or <u>consciousness</u> of the events of the other.

The essential phenomenon of these dual personalities, is a kind of <u>oscillation of the mental</u> <u>level</u> (mental activity), which <u>falls</u> and <u>rises</u> suddenly. These sudden banges, without <u>sufficient</u> <u>transition</u>, bring about two different states of activity: the one <u>higher</u>, with a <u>particular exercise</u> of all the senses and functions; the <u>other lower</u>, with a great reduction of all the cerebral functions. These two states separate from each other; they <u>cease to be connected together</u>, as with normal individuals, through gradations and remembrances. THE STIGMATA OF HYSTERIA.

Diagram - Note the "oscillations" of the "mental" level.

After Pierre Janet.



They become <u>isolated</u> from each other, and from these two separate existences. Here is a "mental dissociation" - a dissociation not only of an idea, not only of a feeling, but of one mental state of activity..

In some subjects three or more personalities have been assumed.

Hysteria has some close relations with insanity; many insane women have previously been hysterical, and it is not always easy to draw the line between the two states.

THE DIAGNOSIS OF HYSTERIA.

In hysteria we may see essentially the same signs and symptoms that occur in organic paralysis of the nervous system. Organic disease is not infrequently complicated by the presence of hysteria. In a doubtful case the golden rule is: "Wait and watch the patient for a while before coming to a definite decision." We have examined from time to time the main points in the distinction of hysterical affections from organic disease of the organs of special senses, of the thoracic or abdominal viscera, or of the joints. Decide the important point whether the symptoms of disturbance of the nervous . system which are present are due to organic disease or to hysteria. Examine for these signs which are positive evidence of organic disease of the nervous system. Presence of organic disease does not exclude the co-existence of hysteria. Examine the affections of the sensation, and of the special senses, and the various paroxysmal disturbances. Ascertain if there are any hysterical sitgmata, and bear in mind that a negative result as regards these stigmata does not necessarily exclude the hysterical nature of some particular symptom. The most important signs of organic disease are:- (i) Optic

neuritis. (ii) Optic atrophy. (iii) Absent kneejerk or Achilles jerk. (iv) Marked nystagmus. (v) Hemianopsia. (vi) An extensor plantar reflex. (vii) Sustained and pronounced ankle clonus. (viii) Motor or sensory paralysis in the domain of a single nerve or nerve root. (ix) Incontinence of urine. (x) Reaction of degeneration.

How to proceed to diagnose the condition.

(i) Careful enquiry into previous conditions and symptoms. (ii) Find out the occurrence of the Globus hystericus of emotional attacks, of weeping and crving. (iii) Compare these convulsive attacks with those of true epilepsy (see table below). (iv) Hysterical paralysis is very variable and apt to be associated with anaesthesia. (v) Hysterical contractures are very deceptive and simulate genuine organic disease. (vi) Examine for areas of anaesthesia and the so called hysterogenic spots. (vii) Note if there is any retraction of the visual field. (viii) Watch carefully the minor hysterical manifestations. (ix) The contractions disappear under full anaesthesia. (x) Never confound real lateral sclerosis with the spastic paraplegia met with in hysteria. (xi) Examine all the visceral manifestations. (xii) Examine carefully the mental condition as these hystericals almost always practice deception. This table is after J. H. Clarke :-

Hysteria.	Epilepsy.
Often an emotional cause.	No definite cause for at- tack.
Aura often prolonged and elaborate.	Aura if present is gener- ally momentary.
Onset gradual.	Onset sudden.
Injury from falling absent.	Injury from sudden fall common.
Tongue not bitten.	Most commonly bitten.
Urine and faeces never passed.	Pale urine often passed, rarely faeces.
Loud screams or cries in course of fit.	One cry at onset.
Loss of consciousness not complete.	Consciousness completely lost.
Patient may remember fit or some part of it.	No memory of period of fit.
Fit frequently followed by stage of delirium: patient rapidly recovers normal condition after fit.	No delirium; patient may be confused, stuporous or fall into deep sleep after fit.
Fit is frequently re- peated.	As a rule, single.
Time of onset not during sleep.	Frequently nocturnal or in the early morning.
Attack may be cut short by various means.	Ends spontaneously.
Exclude <u>lead poisoning</u>	in obscure cases of ner-
vous disease. Hemiplegia,)	not affecting the face,
or attended with labio-gloss	sal spasm and associated
with anaesthesia (hemiannes	thesia or segmental an-
aesthesia), in a young woman	n without any heart lesion
(especially mitral stencesis) or any syphilitic his-
tory, is almost certainly ha	vsterical.

Disseminated sclerosis usually occurs in nontypical or atypical forms especially in young females, and may offer great difficulty in diagnosis.

Disseminated Sclerosis.

Hysteria.

- 1. Symptoms are slow or sudden.
- 2. There is a psychical cause (emotional) but <u>very definite</u> as a rule.
- 3. It is more permanent and disappears suddenly.
- 4. Not paralysed.
- 5. Objective feeling of anaesthesia.
- 6. Knee jerks exaggerated but never absent.
- 7. Ankle clonus is well marked and lasting.
- 8. Sudden in hysteria.
- 9. Very often absent in hysteria.
- 10. Only tremor which is definite and rhythmical.

We shall again examine the chief points of difference in an organic and functional hemiplegia. Buzzard says: "In true hemiplegic contractures you

- 1. Symptoms may come on suddenly or slowly.
- 2. There is usually a psychical cause but very indefinite.
- 3. The paralysis is often transitory and relapsing.
- 4. The oculomotor muscles are paralysed.
- Subjective feeling of dullness and numbness.
- 6. Knee jerks exaggerated but very often absent.
- 7. Ankle clonus is not well marked and lasting it is weak and momentary.
- 8. Contractures gradually established.
- 9. Entensor plantar reflex is present.
- 10. Optic atrophy, nystagmus, scanning speech, and well marked intention tremor.

"cannot by any amount of force straighten the whole "limb at one moment. If you straighten out the fin-"gers, the wrist remains rigidly reflexed. Bring the "meracarpus into a line with the forearm by extending "the wrist, the fingers will, <u>ipso facto</u>, become ri-"gidly reflexed." In hysterical contracture the forearm, hand and fingers can be brought into the same place in many cases.

Remember that ankle-jerks, knee-jerks; wristjerks, and tendon reflexes are very often exaggerated in hysteria, but a <u>unilateral exaggeration</u> of tendon reflexes indicates, however, not hysteria but some <u>organic</u> lesion.

Diagnosis of Hysteric Paralysis.

Extrinsic. Examine the symptoms that are foreign to the paralysis itself, the disturbances of the sensibility, the disturbances of the intelligence, the simultaneous pehnomena, the circumstances of the appearance, etc. This is not so important as the <u>Intrinsic</u>. Examine the paralysis itself and its clinical characters. Take into account the localisation and form of the paralysis. <u>Freud</u> has insisted a great deal on this point. Hysteric paralysis never affects only one muscle: it always affects a group of muscles. This affected group is always one that is necessary to a function of a part of the body. It does <u>not</u> encroach upon other regions. It is otherwise in all organic paralysis. Freud further remarks that hysteric paralysis is often seated in the extremities of the limbs only, which does not happen in organic paralysis, the latter more often affecting segments that are near the centre. Hysterical paralysis is exaggerated, always carried to an extreme, which is very rare in organic paralysis. In hemiplegia due to cerebral haemorrhage the patient can still move a little and makes efforts to conceal his paralysis, but in hysterical hemiplegia there is no longer a shadow of a movement in his diseased side. Todd and Charcot pointed out this and said that the subject affected with organic hemiplegia has a helicopode walk, i.e., the patient walks helically, throwing his paralysed leg sideways by a movement of his loins. The subject affected with hysterical hemiplegia has a helcopode walk, i.e., he drags his paralysed leg in walking as if it no longer existed at all. Hysterical hemiplegia is not accompanied by any serious disturbance in the diseased limb; in particular, there is no atrophy, or at least, a very long time is required for it to appear after the period of immobility; so always take careful measurements. The existence of a notable atrophy will help you to recognise certain lesions of the medulla or brain. The reaction of

degeneration which is so rapid in anterior poliomyelitis and in certain forms of medullar lesions, does not exist in hysterical paralysis. M. Babinski, the noted French physician, studied the "reflexes" very elaborately. In a general way, it might be said. that all the reflexes of a limb must remain normal in a hysteric paralysis. But, in an organic lesion, a certain number of reflexes must always be injured. because the lesion always bears more or less upon one of these centres. Examine all the tendinous reflexes wrist, elbow, knee, tendon of Achilles. These jerks must not be suppressed as in tabes, nor exaggerated as in cerebral haemorrhage or in lesions of the pyramidal tract. The ankle clonus which appertains exclusively to the lesions of this pyramidal tract, does not exist in hysterical paralysis. Examine the cutaneous reflexes and look for the important sign of Babinski. In upper motor neuron lesions, you observe a raising and extension of the toes, but nothing like this can be observed in hysteria. Excitation of the skin in different regions of the body, on the internal surface of the thighs, on the abdomen, on the neck, determine in normal man contractions of the "peaucier" muscles, that is to say the muscles of the skin, which disappear in "organic accidents" and not at all in neuropathic phenomena. Slightest disturbances of the

reflexes of pupils to light, to accommodation, etc. Strongly indicate organic lesions. Lastly, Babinski has shown in the importance of the preservation of the muscular tonus in hysterical paralysis. Thus it is possible to diagnose a hysterical hemiplegia through this objective examination which requires nothing of the patient's psychological observation. How far are we justified in depending on objective examination? The whole examination is perfect theoretically but practically it is not so easy. Can we absolutely rely on the reflexes? First of all we must eliminate the signs derived from the mere exaggeration of the tendinous reflexes. The sign of the clonus of the foot has more importance. Several authors have pcinted out cases of unquestionably hysterical paralyses in which it has been met with. Some authors maintain that if they take the graphic of the shake with an instrument, they recognise the regularity of the organic clonus in contradistinction to the irregularity of the hysterical clonus. As remarked before, Babinski's sign is never positive in hysteria. The pupillary reflexes are likewise of capital importance. Be always on your guard when you meet with the sign of Argyll Robertson. But this sign is not absolutely characteristic either; first of all many neuropathic patients have pupillary dilatation, then, in some hystericals, there are contractures of the iris with dilatation or myosis, which prevent the proper testWhat are the <u>most important signs</u> in favour of an <u>organic hemiplegia</u>? (i) The invasion of the face. (ii) The disturbances of speech.(iii) The clonus. (iv) The signs of the toes (Babinski's reflex). (v) The pupillary disturbances (Argyll Robertson's pupil and failure of accommodation.)

Extrinsic examination.

Examine "sensibility" and its modifications. There are of the greatest importance in hysteria.(For a full account see the article on "Disturbances of sensation" in hysteria).

Besides anaesthesia (which we have considered at length) there are other mental phenomena which accompany hysterical paralysis. The most curious are connected with a kind of indifference. Paralysis of organic origin cause distress and inconvenience to the sufferers, and such patients make desperate efforts to recover the motion they lost. But observe a typical case of hysterical paralysis. One of the limbs being out of use does not inconvenience the patient who thinks it is quite natural to walk with but one leg. It was just this that determined the famous distinction J.M.Charcot made between the helicopode and helcopode gaits, while the patient affected with an organic hemiplegia labours hard to move his disabled limb forward, the hysterical drags her's after her like a cannon ball. This conduct corresponds to a special mental trouble. Fere

observed "I ask her to try to represent to herself "her left hand executing movements of extension and "flexion. She is not able to do it. She can repre-"sent to herself her right hand making very complicated "movements on the piano, but on her left, she has the "sensation that her hand is lost in empty space . She "cannot represent to herself its form." (Ch. Fere. "La Pathologie des Emotions," 1892, p. 143). Bastin, the English author says: "When I ask her if she can "imagine that she touches the tip of her nose with her "finger, she immediately answers: 'yes.' If I ask her "to imagine the same movement with the paralysed limb, "she remains hesitating and at last answers, 'no." "She can imagine herself playing on the piano with her "left hand but not with her right hand." (Bastin, "Various forms of Hysterical or Funct. paralysis, 1893, p. 15).

Brodie said:"In hysterical paralysis, it is not "the muscles which do not obey the will, it is the "will itself which does not enter into action." W.Page added: "When the patient says: 'I cannot,' it means, "'I cannot will."

<u>Paraplegia</u> may give rise to great difficulty in diagnosis. Remember that in the earliest phases of D. S. (Disseminated Sclerosis) you may get spastic paraplegia. Exclude hysterical paraplegia from paraplegia due to compression of the spinal cord by caries of spine or from a transverse dorsal myelitis with spastic contraction of the limbs. In hysteria however, (i) The onset is sudden. (ii) Ankle-clonus. if present, is of the spurious form. (iii) The plantar reflexes are absent, or not extensor in type. (iv) Incontinence of urine is almost an exceptional occurrence. If anaesthesia is present in the hysterical form, which is unfortunately not always the case, its distribution is a valuable aid, for it allows the distribution already described, whereas in trans-myelitis the upper limit of anaesthesia corresponds to the level of the lesion in the cord, and in compression myelitis loss of sensation appears late in the disease, after loss of motor power. Bed scres practically never occur in hysteria. In compression myelitis from caries the pain is more limited and constant in one place, whereas in hysteria, if present, it is apt to be diffused over a wider area and vary in the seat of greatest intensity. Intra cranial tumour, abcesses, or meningitis have been mistaken in early stages for hysteria. If these affections are actually complicated by hysteria and its manifestations, then the diagnosis is very difficult indeed. Fortunately, the absence of optic meuritis is rare in tumour, the greatest difficulty arising in these cases of abcess in which there is no sign of a primary focus of infection. Remember the occurrence of brain abcess in connection with some lung

disease and bronchiectasis. Further, many young girls suffer from acute lead poisoning and these symptoms sometimes simulate hysterical manifestations.

""Myasthenia gravis." in which the symptoms of bulbar origin are unattended by any recognisable lesion after death, may be taken for hysteria. The affection of voices, dysphagia, loss of power over the tongue and lips, and other bulbar symptoms, are generally occupied by some oculomotor paralysis, by a similar paresis of one or more of the limbs, and by dyspncea, or attacks of dyspncea. Remember the "myasthenic reaction" in which the muscles react well at first to stimulation by the faradic current, but as the stimulation is continued, they soon cease to respond to it. Buzzard maintains that Sporadic or Isolated cases of Friedereich's disease may be mistaken for hysteria. Remember that in such cases the iliopsoas is paralysed. While giving your diagnosis remember hysteria is not infrequently complicated by the presence of (i) Disseminated Sclerosis. (ii) Alcoholic paralysis. (iii) Tabes dorsalis. (iv) Diseases of the spinal cord due to traumatism, hemiplegia due to haemorrhage or softening. (v) Syringomyelia. (vi) Caries of the vertebrae. (vii) Facial paralysis. (viii) Chorea, and (ix) Exophthalmic goitre.

What are the differences between hysteria and neurasthenia? In hysteria we generally see the various

disorders of sensation, concentric contraction of the field of vision, contractures, or paroxysmal manifestations. In neurasthenia the patients are generally older, the mode of origin is different, the symptoms are more vague and indifferent, the patient is more anxious about his symptoms, and is more often depressed; anaesthesia, marked contraction and paralysis, are not seen in neurasthenia. In individual cases the border line is very often difficult to define. Hysteria might be complicated with neurasthenia and vice versa. It sometimes comes to striking a balance between the two sets of symptoms, and deciding in favour of the predominating ones. With regard to "malingering," the chief aid to diagnosis is a sound knowledge of the phenomena of disease, whether organic or functional.

T. D. Savill gives the following table of diagnosis:-

	Neurasthenia.	Hysteria.	Hypochondriasis.
Sex.	Both sexes almost equally.	Female sex almost exclusively.	Male sex almost exclusively.
Age	Any age - young male adults slightly predisposed.	The first actual manifestations always appear before 30.	Very rare under 30.
Mental Peculiarities	Intellectual weakness; memory defective; deficient power of attention.	Deficient will power (i.e., vacillation indecision). Want of control over the emotions.	Great determination and persever- ance towards one end, viz., cure of an imaginary disease.
Causes .	Overwork; dyspepsia, other causes of malnutrition, autotoxaemia; traumatic or nervous shock.	A patient is bern with the hys- terical diathesis. The deter- mining cause of its active mani- festations is generally an emo- tional upset or shock.	Solitary, sedentary life.
Onset and Course.	Starts somewhat gradually and runs a fairly even course.	Hysteria essentially a paroxysmal disorder. All phenomena (healthy or morbid) vary from hour to hour, day to day and paroxysmal outbreaks are frequent.	Starts very gradually and runs a very even course of most indef- inite duration.
Mental Symptoms	Mental exhaustion and inability to think or study. Inattention. Memory deficient. Restlessness. Temper irritable.	Wayward, hard to please, <u>emotion</u> - al, restless. No introspection, nor living by rule nor study of medical works.	Introspective Habit Close study of medical books. Observing all accessible organs and secretions.
	Prostration and sadness. Not equal to the exertion of amuse- ment. Sometimes suicidal.	If sad, it is transient (except- ing in the male). Fond of gaie- ty and amusement. Usually joy- ous but laughter and tears may alternate with great rapidity. No tendency to suicide.	Habitual sadness. No taste for amusement. But little tendency to suicide.
Somatic and General Symptoms	Occasionally attacks of vertigo, syncope rare. Convulsions never Attacks of flushing and other sensations after meals.	Seizures of different kinds fre- quently rise. Always flush very readily at any time. Convulsive attacks in 75% of the cases (Briquet). Syncope very fre- -quent. A great variety of symptoms occurring in paroxysms.	No attacks of any kind.
	Easily tired, easily startled. State of <u>Debility and Ex</u> - haustion. Constant headache. Restlessness. Sleeplessness. Long-drawn sighs.	Between the attacks no symptoms usually present. But symptoms referable to the nervous and neuromuscular symptoms may be present.	The digestion is often deranged, but in the patient's belief he has some grave disease either of the alimentary tract, abdominal or other viscera.
	Hemianaesthesia never. Gen- eral hyperaesthesia and dysaesthesia common. Pain in the back and sometimes in limbs. Reflexes may be in- creased or normal.	Hemianaesthesia common (though may be undiscovered) "Ovaric," tender spots arcund the mam- mae, and in other positions. Reflexes usually increased. Borborygni globus, and other spasms of the voluntary and in- voluntary muscles are frequent.	Small and insignificant symptoms or even normal sensations, are endowed with great and perhaps lethal significance. Patient tries an endless succession of remedies and doctors; always striving for a cure (which dis- tinguishes hypochondriasis from the hopeless and suicidal tenden- cies of neurasthenia and melan- cholia.
Termination	Lasts many weeks or months.	The <u>Diathesis</u> lasts a lifetime; but the active manifestations come on suddenly, and after lasting a short time, usually disappear.	Once established, the condition is very difficult to ameliorate, im- possible to eradicate and there- fore -
	Curable.	Temporarily curable.	Incurable.

THE PROGNOSIS OF HYSTERIA.

The prognosis in a case of hysteria is very difficult. It is a very variable disease. It has no definite course. In the majority of cases the prognosis is not very good, for once hysterical, always liable to develop hysterical manifestations. The various and varied symptoms of the disease may be of very indefinite duration. The differences due to age and sex have been examined. In children the symptoms are easy of cure, when rigid measures are adopted as soon as the diathesis is discovered. These children may develop further symptoms or show relapses. In young women the symptoms are not always easy to treat and to cure. It is not a fatal malady except in rare cases (hysterical anorexia nervosa, hysterical vomiting, etc.), but the patient is miserable and causes great worry and suffering to those around her. The more marked the hereditary taint, the more difficult is the cure. Pronounced symptoms are of course more difficult of cure than the minor manifestations. Beware of giving a prognosis in some cases of traumatic origin, in which the resulting symptoms are very persistent. In cases where, owing to marked hereditary tendency, or from unfavourable surroundings,

or the two combined, the disease has come on early. and has given rise to repeated hysterical manifestations of various kinds, the prognosis is very unfavourable. If the sensory disturbances are well marked and persistent the prognosis is very bad. As long as the anaesthesia remains, the patient is liable to hysterical outbreaks of some kind. Certain forms of hysteria are especially apt to relapse. Hysterical aphonia may return again and again. Tremor and other rhythmical movements are liable to recur. In slight attacks there may never be any reappearance of the disorder, if the cause is satisfactorily removed. The most dangerous and fatal cases on record are in which anorexia nervosa has gone on to a profound degree of emaciation and inanition. Death may also be due to hysterical vomiting or hysterical asphyxia in the rare abductor paralysis. Charcot maintains that prolonged hysterical contracture may be followed by lateral sclerosis of the spinal cord. Spasmodic contractions of the limbs, apart from the formation of adhesions, are difficult of relief, if they have lasted any length of time. The tendency then in any particular symptom is for it to disappear at some time or other. However lasting or severe a symptom, it always gets well and sometimes suddenly

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too. Remember Charcot's dictum: "The longer an "hysterical symptom has lasted, the more difficult it "is to cure." If the hysterical diathesis could be traced <u>definitely</u> to <u>hereditary</u> influences, then the prognosis is not satisfactory. In a certain number of cases the <u>mind</u> is apt to become more or less <u>permanently affected</u>, and the patient becomes insane or imbecile, acute insanity being of an emotional type. But, in general terms, the malady though disabling for the duties of life, and most distressing, inconvenient, and burdensome alike to the patients and relatives, only occasionally leads to actual insanity and rarely shortens life. The prognosis depends largely on the <u>environment</u> of the patient.

We may summarise the prognosis in a few words, almost never fatal, never completely eradicated, always remembering the few fatal and rare cases of this disease. THE PSYCHOLOGY OF HYSTERIA.

What are the leading attributes of the hysterical mind?

It is generally agreed that there is an inherent difference between the characters and minds of hysterical persons and those of others who are not hysterical. This difference (or defect) of mind is inherent and inborn in the hysterical person. It has been shown over and over again that this peculiarity of mind is inherent, inborn, congenital, and therefore inersdicable. There is certainly a great difference between the normal type of stable nervous system and the unstable and variable nervous system met with in hysteria. The first great feature that strikes one is the instability and variability of the mental states, the mental faculties, the acts, and the thoughts of hysterical persons. These patients, even in ordinary circumstances, are easily roused to violent expressions of feeling, to hasty judgments, to impulsive actions, and to passionate exhibitions of various kinds. Sydenham in 1680, described this mental instability very well: "All is caprice. They love without mea-"sure those whom they will soon hate without reason. "Now they will do this, now that, ever receding from "their purpose." Briquet in 1859 dwelt more on the

emotional <u>instability</u> as being the chief feature of the hysterical mind, and without doubt it is a very striking feature. Almost all the <u>mental</u> faculties are more or less <u>unstable</u> in typical cases - <u>sensation</u>, <u>perception</u>, <u>memory</u>, <u>imagination</u>, <u>feelings</u>, and <u>emotions</u>, <u>ideation</u> and <u>connation</u>, <u>attention</u>, <u>judgment</u> and <u>will</u> -(are all unstable in a typical hysteric).

The will power is variable and apparently insufficient to control the unruly thoughts, acts, and emotions. This deficiency is more apparent than real, by reason of the strength and unruliness of the emotions which the will has to control. The hysterical mind is an unbalanced mind since <u>all</u> the mental and physical faculties <u>vary</u> from time to time.

<u>Ribot</u> ("Psychology of attention," Chicago, 1890) brings out another important <u>mental</u> characteristic of hystericals. The leading characteristic is the <u>defi-</u> <u>cient</u> power of attention or concentration of the mind on a given subject. Hysterical subjects are very intelligent indeed and some of them have <u>intelligence of</u> <u>a high order</u> but the great defect in them is they <u>lack</u> power to concentrate their minds for any length of time without becoming tired, i.e., their power of engaging attention is faulty. Analyse attention, and examine its constituents.

Attention (Faculty of mind).

Spontaneous attention.

This depends simply on states of pleasure (or pain). This kind of attention needs no mental effort. This often remains unimpaired, so that hystericals are able to appreciate simple pleasures. Voluntary attention.

This requires an exercise of the <u>reasoning</u> powers or judgment. This kind of attention is a <u>later</u> <u>acquisition</u>, and depends upon an effort of the will. It is this kind of attention which is <u>deficient</u> in the hysterical person.

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<u>Charcot</u>, the great French neurologist, drew attention to another <u>mental</u> characteristic of hysterical persons. He observed their constant tendency to <u>mental abstraction</u>, to a kind of self-hypnotism in a waking state, or <u>absent-mindedness</u>. Their attention soon wearies, and they become absent-minded. This quality led the ancients to regard them as soothsayers and seers of visions. <u>Pierre Janet</u>, has well described this condition as a "retraction of the field of consciousness " (see paper on "The Mental State" in hysteria).

Some authors (notably Pierre Janet) mention certain stigmata as belonging to the hysterical temperament. They mention many <u>mental</u> stigmata such as (i) Suggestibility, (ii) Deficient power of attention, (iii) Tendency to mental abstraction, (iv) Lowering of the mental level, (v) Somnambulism, (vi) Fugues, (vii) Double personalities, etc.

Thus we can recognise the hysterical mind but to indetify the hysterical diathesis is not always easy without the occurrence of some physical manifestation. How can we explain the various hysterical disorders (convulsions, paralysis, anaesthesia, globus, syncopal and other attacks, etc), on a psychological basis? The view that all hysterical disorders are of psychic origin is not a new one. Professor Charcot (1880 -1890) held the view that hysterical disorders were due to a physiological change in the brain. He said that it must be some functional or dynamic change. T. D. Savill was the first to suggest that these hysterical manifestations were due to a change in the vascmotor mechanism. Others held the view that these changes were purely mental in origin and are due to some kind of defect in the mind or in the mental processes of the patient, and further, that there is no necessity for assuming any physiological change in the brain (as Charcot did), or any vasomotor or vascular change (as Savill does). Some even regard this disease as a form of insanity. Pierre Janet, the renowned psycholcgist of France, has made most valuable contributions and has investigated the nature of this disease, and came to the conclusion that it is purely mental in origin. He defines hysteria as "a form of mental de-"pression characterised by the retraction of the field.

HYSTEFICAL STIGMATA.

Scheme of the conscious and subconscious levels of the brain. M. motor, and S. sensory impulses.

(After T.D.Savill.)



"of personal consciousness and a tendency to the dis-"sociation, and emancipation of the systems of ideas "and functions that constitute personality." Janet drew the inference that hysterical patients with amaurosis must retain a <u>subconscious</u> power of visual perception, and that their amaurosis is due to a retraction of their fields of <u>conscious</u> visual perception only. (See article on "Disturbances of Vision" in hysteria).

The highest level of the mind is the <u>conscious</u> level; but beneath this is a level of <u>subconsciousness</u> (semiconsciousness) where the synthetic, co-ordinating, recording processes go on and where automatic sensations are recorded, and automatic acts originate. When the <u>control</u> of the <u>higher centres</u> is in abeyance the tracts and the centres in this lower level are capable of acting without the person's consciousness. Hence the absent-mindedness and automatism undoubtedly seen in hystericals (see diagram). The following are some of the leading views as regards the psychology of hysteria:-

Lownfeld - Hysteria is not ideogenesis. Bernheim, Dubois, and Grasset - Hysteria is closely allied to if not identical with <u>insanity</u>. <u>Freud, and Breuer</u> - Hysteria has a psychogenic origin. They have endeavoured to trace the causation of the mental disturbance to some painful emotional shock in the previous experience of the patient, some painful reminiscence in short. Freud maintains that all hysterical phenomena (disorders) are the consequence of some disagreeable, forgotten, subconscious memory. In Freud's own words, "the hysterical suffer from reminiscences." Some mental or emotional shock has occurred in the past life of the patient and has become buried or forgotten in a state of subconsciousness where it becomes the cause of the patient's present hysterical symptoms. Further when this buried reminiscence is translated into awakened consciousness and gives rise to action of some kind the hysterical symptoms disappear. The analytical or the cathartic method of Freud's treatment is based upon the search for, and discovery of, this subconscious painful memory, either by conversation with the patient or by the recital of her dreams or the revival of forgotten scenes. This "sexual causation" of hysteria has been disputed by many writers who say that they have seen several scores of neurasthenics and hysterics whose sexual life history and constitution were absolutely normal. Briquet long ago disputed the sexual crigin of hysteria, and made statistical inquiries among married women, celibates and prostitutes.

J. Babinski - All true hysterical symptoms are

mental in origin. He says that all hysterical symptoms come under three categories :- (i) Simulation of disease as the result of auto-suggestion or subconscious simulation, e.g., paralysis, contracture, sensory changes, etc. (ii) Fraudulent production of symptoms such as anuria and pyrexia. (iii) Skin changes, erythemas, oedemas, haemorrhages, etc., which are all in his belief produced artificially by the patient. Babinski maintains that only the first symptoms, i.e., simulation of disease as the result of auto-suggestion or subconscious simulation, legitimately belongs to hysteria, and that all the phenomena belonging to this limited group can be cured by psychotherapy by auto- or hetero-suggestion, that they can be reproduced in suitable subjects by precisely the same means (hence hysteria is a mental disease according to Babinski).

<u>Pierre Janet</u> - Hysterical symptoms may be dependent upon a fixed idea, but it is the <u>effect</u> of the <u>fixed</u> idea and not the idea itself which is pathological (Loc. cit. p. 326). Janet includes some conditions (such as copralalia, echolalia, and other mental conditions) as <u>hysterical</u>, which most people regard as belonging rather to the category of insanity. Janet further holds: (i)That since many hysterical symptoms, such as right-sided paralysis with aphasia, follow the laws of similar organic symptoms which the patient cannot know, the patient cannot be accused of voluntarily producing or shamming these symptoms. (ii) That in the determination (initiation) of hysterical symptoms certain contributory causes are necessary, such as (a) an exhaustion of the higher functions of the encephalon; (b) a lowered nervous tension dependent either on heredity, puberty, local lesions, intoxications, physical or intellectual fatigue, or emotion. (iii) That although the localisation of hysterical symptoms is difficult to account for, it may be explained by various contributory causes, such as (a) the occurrence of morbid nervous influences along tracts previously damaged by the same symptoms; (b) a dissociation which may bear "on a function that for some reason or other has remained weak or disturbed" or (c) the function that disappears may be "the most complicated and difficult for the subject; or (d) the dissociation may bear on the function that was in full activity at the moment of a great emotion.

Modern neurologists hold the opinion that the bulk (psychologists) of those who find a universal explanation of hysteria in <u>mental</u> conditions, take <u>too narrow a view of</u> the disease. There are some reasons why the psychological school take too narrow a view of hysteria: (i) There is a notable <u>absence</u> from many of their writings of any mention or attempted explanation of some of the <u>common circulatory</u> and <u>somatic symptoms</u>, such as syncope, convulsions, skin phenomena, attacks of "burstings" and "flushings," phantom tumours, etc., etc., and (ii) The <u>relative fre-</u> <u>quency</u> of various hysterical symptoms, according to the psychologists, varies very greatly from that given by physicians engaged not only in psychological work but also in general medicine.

How can we regard such an immensity of hysterical phenomena as a pure psychosis? How are we to account for the hemiparesis, hemiplegia, hemianaesthesia, mottled vasomotor disturbances of the skin and so on, as a mere psychosis? How and why should consciousness be disturbed in this sudden way unless there is some underlying physical change? How are we to account for hysterical convulsions on a purely psychogenic hypothesis? Observe what Sydenham had said long ago: "It is very remarkable that in many cases a notable "sensation of cold (pallor of skin) over the external "parts precedes these symptoms (palsy, convulsions, "clavus, vicarious pains, hysterical cedema), a sensa-"tion which not infrequently lasts throughout the fit. "More than once I have found this coldness to be like "that of a corpse, the pulse meanwhile being natural."

<u>T. P. Savill</u> (Clinical Journal, June 1, 1904), pointed out: "That most hysterical symptoms and dis-"orders are heralded by some <u>vascular</u> alterations in "the skin." <u>Kussmaul</u> pointed out: "That convulsions of greater "or less degree can be determined experimentally both "by <u>cerebral anaemia</u> and <u>cerebral congestion.</u>"

In spite of these facts how can we still regard hysteria as a purely <u>mental</u> disease? The psychic origin of some manifestations, and the psychic origin of a few cases of hysteria is undoubtedly beyond doubt, but to hold that every case of hysteria is a pure <u>psychosis</u>, is taking <u>too narrow</u> a view of this disease. Cases of psychological phenomena pure and simple, of course, admit of psychogenic explanation. Some cases of anaesthesia may be quite well explained by psychogenics, but some cases of <u>hemianaesthesia do not</u> admit of psychogenic explanation. The resemblance in hemianaesthesia and hemiplegia is to a true <u>embolic</u> lesion, and this of itself suggests that some <u>vascular</u> lesion must be in operation, in most of the various manifestations of hysteria.

The rôle of mind in hysteria is a very important one. A certain proportion of hysterical symptoms are purely mental, the emotions, are unstable, and exercise an undue influence over all the mental and bodily functions. Hysterical patients have certain peculiarities of the mind which render them liable to mental disorders of a peculiar kind such as <u>catalepsy</u>, <u>trance</u> somnambulism, dual personalities, etc. The <u>mental</u> peculiarities of an hysterical person are apt to lead to the <u>exaggeration of symptoms</u> which may have been initiated by some slight physical basis (probably a vascular change).

From the foregoing facts it is not possible to see how any single <u>hypothesis</u> or theory, whether <u>psy-</u> <u>moral</u> or <u>moral</u>, can apply to all the varied and manifold manifestations of hysteria. Some hysterical symptoms can be traced to a disturbance localised to some <u>definite spot</u> in the nervous system, and this difficulty confronts many psychologists. <u>Savill</u> maintains that <u>the nature</u> of the hysterical lesions in the great majority of cases is vasometor.

A BRIEF NOTE

ON THE PROPHYLACTIC TREATMENT IN SUSPECTED CASES OF HYSTERIA AND HYSTERICAL DIATHESIS.

If signs of neuropathic temperament show themselves in early life, and where there is a marked hereditary tendency to hysteria, or in cases in which patients exhibit minor hysterical manifestations (hysterical diathesis), preventive treatment must begin very early and during childhood. If the mother is hysterical, and is not a genial companion to her daughter, or the family conditions not satisfactory, send the child away to a boarding school. Let the child have sufficient recreation, steady exercises, and abundant food and suitable warm, but non-irritating clothing. Never let her overwork herself, and never allow excessive mental work for school examinations, etc. Let her have an excess of sleep, and all lessons in the evening before going to bed have to be discarded and discouraged. Train the body thoroughly, for without a healthy body you can never expect a healthy mind. Harden the child to the cold fresh air by allowing her plenty of regular and systematic work exercises. Ward off bad sexual habits and completely watch girls at the time of, and during the first catamenial period.

Give the child sound moral <u>training</u>. Inculcate habits of perseverence, self-control, and love for others. Do not hesitate to correct selfishness and emotional excitability.

If the family is not suitable, always get the girl away from her home, and get her a suitable occupation which will sufficiently engage the attention, and which will <u>not</u> allow <u>introspection</u> and daydreaming. If music causes too much emotional fervour, it is better that such subjects do not practise too long at it. Undue social excitement is injurious, but congenial and happy company is very essential to hystericals.

THE TREATMENT OF HYSTERIA.

Appreciate this nervous and mental disease thoroughly. Never treat hysterical patients with cruelty or harshness. The best remedy for them is to get them a suitable occupation. Lack of decision and absence of definite tastes are exceedingly injurious qualities which bring out the gravest disorders and symptoms of this disease. Professor Wyllie always teaches, "Let them be able to say at the end "of the day's work - 'Something attempted and some-"thing accomplished'". A happy marriage with favourable conditions in life often cures hysteria, for matrimony is a valuable adjuvant as it gives the young woman occupation, interests, and responsibilities. One has always got to remember that the strain and responsibility of childbearing and nursing may decidedly aggravate it. Promise that recovery will come with patience and perseverence. Do not give any undue sympathy in her many ailments.

The rational treatment of Hysteria would be to consider the Etiology, Pathology and Symptomatology of the disease. Hysteria is not a pure and simple psychosis, and so cannot be entirely treated psychically. In this disease we evidence a more widespread instability than the mere emotional instabiliity which after all forms only one part, namely, the mental part.

It is acknowledged now (a) that hysteria consists of an instability or undue irritability of all the reflexes and nervous centres throughout the body. (b) That the Vasomotor System is practically unstable and irritable. (c) That the essential defect in the Nervous System in hysteria is inborn and inherent. (d) That the reflexes and reflex centres in hysterical subjects are more unstable and more irritable than those of other people. (e) That hysterical tremor and other hysterical manifestations are due to Vascular changes in the Nervous system. (f) That hysterical paralysis is due to Vascular changes in the nervous system which are due to the Vasomotor instability and irritability in that diathesis. (g) That fear, grief, religious exercises, pregnancy, parturition, sexual excesses cause hysterical manifestations in those who have unstable and irritable reflex centres. (h) That overwork, shock, injuries, worry and anxiety are predisposing causes of this diathesis. (i) That the toxins of alcohol. typhoid. influenza, Lead, Diabetes, Syphilis also tend to produce manifestations of Hysteria in those who are inherently disposed towards the diathesis, have long been acknowledged.

Examination of the Hysterical subject must be conducted on a systematic and thorough system.
Exclude tuberculosis. Treat anaemia by arsenic and Iron. Treat heart disease or any other Visceral disorders on the ordinary lines. If the sexual apparatus is diseased treat it on the usual medical lines, and if necessary on Surgical lines. Always carry out the proper treatment if there is any organic lesion, irrespective of the hysterical symptoms. Exercise your influence and gain the patient's confidence. Be sympathetic and yet firm, always exercising a moral force in convincing her that she is getting better every day. Let them realise that their case is curable and within the resources of the medical art. Diagnose the condition with thorough confidence - act promptly and decisively. If you are at once able to arrive at a proper diagnosis watch the symptoms carefully and closely. Use the influence of direct and indirect "Suggestions." Promise her complete recovery, predict the course of her illness, and make other useful suggestions. Cure is affected by force of Will power, unwearying patience and steady encouragement. If there are minor symptoms (such as spasms, cough, twitchings, noises, crying, weeping spells, laughing, attacks of Vapors, etc.,) excite no interest or anxiety. The effect of judicious neglect of such symptoms is sometimes very effectual. Early treatment of

Hysterical symptoms is one of the most important indications. It is absolutely essential to "isolate" patients from their surroundings in severe and persistent cases. Poor patients may be isolated in hospitals, but the "better classes" can be isolated in their own homes, provided the friends and relations give the doctor his own way and his own say, and get an "efficient nurse" trained in this disorder. Get a nurse with strong will-power and with some sound education. She must be sympathetic yet firm and tact ful. Nursing hystericals is by no means an easy art. In difficult cases with anorexia nervosa, hysterical angina pectoris, vomiting, hemiplegia, contractures or paraplegia, keep the patients directly under your care and give them the full benefits of the Weir Mitchell treatment. Judge every case on its own merits, and order complete or partial isolation. as the case demands. The Weir-Mitchell treatment is most beneficial in cases of hemiplegia, paraplegia. contractures, and anorexia nervosa with emaciation. The essentials in it are isolation, rest, massage and overfeeding, with or without galvanism. Rest should be given from six weeks to six months or more. Begin massage on the third or fourth day. This massage at first consists "of gentle stroking of the whole body" for from fifteen to twenty minutes,

then "deep massage" of the <u>entire</u> surface of the body and limbs gradually increased to about an hour or an hour and a half, once or twice daily. The best tests of improvement are (i) Gain in body weight, (ii) The patient's power of digesting and assimilating food. Excessive urates in the urine show that the food is not properly utilised. In such cases the mistake is either with the food or with the massage. Proceed to rectify the defect, i.e. change the dietary or get a new masseur or masseuse, as the case demands.

Treatment which is scientific, satisfactory, and permanent, can only be carried out on definite lines and with definite objects.

Proposed Line of treatment of Hysterical Diathesis.

1	2	3	4	5	6
<u> </u>	1	1	T	1	1
The treat- ment of Symp- toms mainly by drugs.	Treat- ment to allay the irrit- able & unstable Nervous System.	Treat- ment of the Vaso- motor mech- anism.	Treat- ment of Aeti- ology (Etio- logi- cal treat- ment.)	Educa- tional treat- ment. 1. Physical 2. Mental 3. Moral.	Prophy- lactic Treatment.

Treatment of Symptomatology mainly by Drugs: -

The following are time-honoured prescriptions:-R_X Tinct. Valerianae Ammoniatae . Drachms four Spiritus Chloroformi . . Drachms two Infusum Valerianae ad . . ounces six

Sig. One ounce three times daily. M. A. W.

R_X Zinci Valerianatis . . . grs xx. Pilulae Galbani compositae . . grs xxxvi Olei Sabinae . . . m. xxv. Divide into twelve pills - Take one thrice daily. (In amenorrhoea with Hysteria).

M. A. W.

Px Tincturae Valerinae Ammoniatae . Drachms two Tincturae Hyoscyami . . Drachm one Ammonii Bromidi . . . grs. xv. Aquae Camphorae q. s. . ad ounce one Fiat Mistura. S. Two tablespoonfuls thrice daily.

Rx. Zinci Valerianatis . . . gr. i Ferri Valerianatis . . . gr. i Quininae Valerianatis . . gr. i Extracti Gentianae . . . q. s. Fiat Pilula. S. one pill three times daily. P_x Tincturae Asafetidae . . . Tincturae Valerianae Ammoniatae . àā Drachm one Tincturae Hyoseyami . . Drachm half Aquae Camphorae . . q.s. ad ounce one. Fiat Mistura. S. Two tablespoonfuls three times daily.

Px Liquoris Arsenicalis . . . M three Ammonii Bromidi . . . gr. ten Extractum Ergotae Liquidi . . M twenty Tincturae Aurantii . . Drachm half Aquae Cinnamoni . . q.s. ad ounce one. Fiat Mistura. S. Two tablespoonfuls three times a day.

P_X Tinct. Asafetidae . . . Drachms two Tinct. gumbul . . . Drachms two Tinct. opii. . . Drachm half Aquam Menthae Piperitae ad . ounces eight. <u>Sig</u>. Take one ounce every four hours. <u>M.A.W.</u>

Px. Extracti Hyoscyami . . . grs 20 Camphorae grs 20 Lupulini grs 20 Divide into twelve pills. S. Take two at bedtime. (In sleeplessness in Hysteria) M.A.W.

- P_X Spiritus ammoniae Aromatici . Drachm half
 Spiritus Lavandulae . . M xv.
 Spiritus Ammoniae Fetidi . . Drachm half
 Aquam Menthae Piperitae q.s. ad ounce one.
 Fiat Mistura. S. Two Tablespoonfuls thrice daily after food.
- P_X Zinci Valerianatis . . . Grains three Pil. Asafetidae co. . . Grains two For one pill. S. One pill night and morning.

Px	Zinci Valeriana	tis	•	•	. grs	two
	Acid. Camphoric			•	. gr.	one
	Ext. Belladonna	ie.			. gr.	quarter
	Cannabin Tannat	is			. gr.	quarter
Fo	r one pill. S.	To be	taken	twice	dail;	y.

These prescriptions are by no means exhaustive. The other drugs usually employed are the three bromides, cannabis Indica, Asafetida, Phosphorus, Quinine, Cinchona preparations, Strychnine, Valerianates (especially Zinci Valerianas), Validol, Auri chlorid. and Bromid., Acid camphoric, Mist. Ferri, Pil. Alces et Myrrhae, Phenazonum, Bromipin, Belladonna Glycerophosphates, Musk, Gumbul, etc., etc.

For allaying the unstable and irritable Nervous system use the bromides. Iodide of Potassium is

probably the best. Ammonium bromide is very useful in many cases. Many physicians give the three bromides in combination. It has been found by experience that Ammonium bromide may be given for months and years without any great detrimental effect. The prolonged giving of bromides may mask some causal condition which is causing hysterical manifestations_ So stop giving bromides after some time and carefully watch how the patient reacts. Never be tempted to give opium or any other of its many preparations for not only you may form the dangerous drug habit but during the reactionary phase the patient gets considerably worse than ever. Cure hysterical convulsions by giving hypodermic injections of apomorphine. This drug causes copious emesis, and soon the "Splanchnic storm" clears up. Never allow alcohol for it tends to form the "habit" so easily engendered but it acts detrimentally, producing conjection and hyperaemia first in the splanchnic areas and then in the brain. Furthermore alcohol produces incoordination, and paralysis of the Vasomotor apparatus. If stimulants are necessary give Valerian and Asafoetida. These are excellent for faintings, collapse and prostration. Recently "Borneel Isovalerianate" has been found to be of great value. The odour of Valerian and Asafoetida is very unpleasant and

disagreeable. These are peculiarly suitable therapeutic agents to many hysterical patients by the nausea they produce, and their subsequent and muchdesired "mental-effect."

Treatment to ally the unstable Reflex centres and

the N. S.

The fundamental steps of this line of treatment are:- (i) Rest, (ii) Food, (iii) Electricity, (iv) Massage, (v) Hydrotherapy, (vi) Psychotherapy, (Hypnotism and Suggestion) (vii) Isolation from home.

Treatment by "Rest," - Of all methods, drugs and appliances Rest is one of the greatest and most formidable therapeutic weapon we possess. It allays the irritable and unstable nervous system. "Rest of mind and rest of body" is the best recuperative and reconstructive agency we know of for the cure of the devitalised Nervous mechanism. There ought to be no peripheral irritation, and absolutely no worry or anxiety. During the exercise of this "Rest of mind and rest of body" there ought not to be the slightest strain, neither physical nor mental. The patient must not think - must not use her intellect, nor must she use her body. Complete rest of body can only be had in the "recumbent posture and only in bed, and if the patient sits up or moves about in bed, then the sum total effect of rest is not so

complete and satisfactory as when complete recumbency is practised. Educate your friends gradually to <u>relax</u> all her muscles, and direct her <u>mental</u> attention to the relaxation of her muscles. This is <u>effectively</u> done only through time and after laborious patience. Procure abundance of sleep for hysterical patients, and if necessary employ either drugs, or the cold and hot packs at bedtime.

"Diet" in Hysteria:-

Give plenty of food, as much as the patient can take. Let it be easily assimilable food. This improves the nutrition of the nervous system and the body generally.

Begin with <u>peptonised</u> or <u>skimmed</u> milk, especially in cases of <u>anorexia nervosa</u>. Then give three ounces of fresh milk every three hours, in three days increase it to five ounces every three hours, and then finally the fresh milk is increased to ten ounces every three hours. Add "Plasmon" to the milk and increase the dietary ladder by giving fish, white meats, chicken, etc. Gradually increase the diet to three full meals in twenty-four hours, with an additional four or five pints of milk. Give meat-soups and broths, and use such foods as Plasmon, Mellin's food or Benger's food, Horlich's malted milk. Sanatogen, which contains caseinogen in combination with sodium glycerophosphate, is, in my opinion, particularly valuable in some cases. Two of my cases owe their recovery to the high stimulating and food-value of Sanatogen. What is the "criterion" of progress? "The gain in bodyweight" is our best clinical guide. Always avoid dyspepsia, which is due to excessive and injudicious feeding. The accompanying full diet list is recommended by Dr Playfair.

Breakfast: 9 a.m. Porridge with cream, fish or bacon, cocoa or coffee.

- <u>ll a.m.</u> Beef-tea, and half an ounce of beef-peptonoids.
- Lunch: 1.30 p.m. Fish, cutlets or joint, stewed fruit or milk pudding.
- <u>5 p.m.</u> Beef tea, and half an ounce of beef-peptonoids.
- <u>Dinner: 7 p.m.</u> Soup, fish, joint, poultry and sweets, etc.

Additional

- 1. Three or four pints of milk.
- 2. Mild Faradic Current.
- Tonics, Iron, Quinine, Strychnine, and Arsenic.

4. Bromides for sleeplessness.

5.	Abdominal	massage,		laxatives	and	
	enemata	for	const	tipation.		

6. Hydrotherapy.

7. Hot air and electric baths.

Daily programme of full rest cure by Dr J.K.Mitchell.
7 a.m Cocoa, cool sponge bath with rough rub,
and toilet for the day.
8 a.m Breakfast with milk, one hour's rest.
10 a.m Eight ounces peptonised milk.
ll a.m Massage (general) about half an hour.
12 noon - Eight ounces milk or soup, reading aloud
by nurse for half an hour.
1.30 p.m Dinner, rest an hour.
3.30 p.m Eight ounces peptonised milk.
4 p.m Electricity.
6.30 p.m Supper with milk, rest an hour.
8 p.m Reading aloud by nurse half an hour.
9 p.m Light rubbing by nurse with sheet bath.
Three ounces malt Extract with meals, tonic after
meals.
Eight ounces peptonised milk at bedtime or during
night if desired.
Duration of treatment - eight to twelve weeks as
a rule. It may be more or less, depending on the

progress made. No definite time--limit can be fixed beforehand.

Electricity as a therapeutic agent in Hysteria.

Electricity may be employed for its general effect or to relieve special symptoms. Use faradism for the general effect or use the electric bath, which is the best form of electrical treatment. For hysterical affections of the voluntary muscles there is nothing better than the Faradic or Galvanic current. The Faradic is certainly more suited and more useful for the various forms of paralyses, and the Galvanic current for the various forms of contractures and rigidities. It is too well known how the Faradic current rapidly cures "Hysterical aphonia." Static electricity is also excellent as it improves the general tone and nutrition of muscles, produces a marked psychic effect upon the patient, which is of great value and particularly useful for the various anaesthesias of Hysteria when used by the "Method of Sparking." Even a few applications of the static sparks cause an appreciable diminution of the area of anaesthesia and paralysis. Perseverance in these methods causes an ultimate cure in many cases. Of course the most modern form of electricity we have is the

"high-frequency current," and it has been acknowledged to be very useful in many cases of Hysteria. The Electric Bath -

The bath must be capable of complete insulation and the current conveyed to the water by large electrodes placed at the ends of the bath, the one at the head being protected by a wooden frame against which the patient's shoulders and head rests. Tf the ordinary bath cannot be insulated, a large wooden trough will do quite well. Use the Sinusoidal current or that obtained from a secondary coil, the primary coil being connected with the alternating current from the mains. The current used should be just strong enough to be felt and the duration of the bath ten to twenty minutes. These baths undoubtedly give good results in many cases of hysteria. The latest development of this form of electricity in treatment is the use of a polyphase or triphase current which is believed to be most effectual. It is said to raise Blood pressure, and have a remarkable action on the unstriped muscle fibre and especially useful in atonic constipation and gastric atony. If the Singsoidal current cannot be used, employ the Faradic current in the form of a general bath or general faradisation by ordinary electrodes. This is useful in general muscular

debility and in troublesome sensations of anaesthesias and hyperaesthesias, such as tingling, pricking, or numbness of the hands and feet, or of the limbs.

Static electricity is frequently employed, and is said by many observers to be the most useful and efficacious in hysteria. Produce a strong "mental effect" in all your hysterical patients. Try the effects of high frequency current. The patient is seated on an insulated chair or couch (auto-condensation method), and the "breeze" from an electrode applied to the part desired, or produce "sparking" (which is rather painful) if a greater and more profound mental effect is desired.

Massage as a therapeutic agent in Hysteria.

Massage - General and local Massage.

Professor J. M. Charcot at the Salpetrière adopted a system of treatment. The essentials of it are rest, Isolation from friends and home, abundance of food, and massage.

General massage is given daily with a double object - to soothe and allay the irritable and unstable Nervous System. This is done by "stroking movements." "Kneading" and other movements promote the tissue changes and nutrition of the body. "Tapotement" may also be tried with good effects in some patients. Begin with about half an hour's

massage - then increase it to about one and a half or two hours daily. The patient should be instructed to drink hot milk, and not to move about or speak for an hour after the massage. Keep the bowels clean by suitable aperients and allow occasional doses of chloral and bromides for sleeplessness. It goes without saying that the Charcot-Weir-Mitchell methods should never be adopted except by the skilled physician, i.e. the specialist, otherwise the patient might be unnecessarily put to serious trouble and inconvenience. Forget not that the most suitable cases for this valuable Charcot-Weir-Mitchell treatment are:- (i) Those cases which are purely of Nervous origin. (ii) Those cases in which there is great irritability, unstability of the neuro-muscular apparatus as evidenced by twitchings and increase of the superficial and deep muscular reflexes. (iii) Those cases in which the nutrition is below par

are well adopted for this treatment, i.e. cases with emaciation and anorexia nervosa.

Cases in which the treatment is contra-indicated are:-

- (i) When the digestive organs are not in good order.
- (ii) When there is organic disease.
- (iii) When there are toxic and septic causes in operation.

(iv) Cases exhibiting persistent gloom and despondency are particularly unsuitable for this treatment, and considerable harm may be done in such cases.

(v) Cases presenting mental aberrations of any kind are not suited for the Weir-Mitchell treatment.

Complete rest in bed has been thoroughly of value in curing many hysterical hip-joints and contractures. Hysterical aphonia is cured by Faradism to the larynx but a period of rest is essential after the apparent cure of the condition.

Many hysterical cases having clonic spasms and weaknesses, various paralyses are cured under a proper treatment of rest, good food, and general massage. In hysterical muscular affections always advise "Systematised massage and educational movements."

Hydrotherapy as a therapeutic agent in Hysteria.

This treatment (the "water-cure") is greatly in vogue in France and on the Continent, and extensively practised by J. M. Charcot and others, but it has not been so well tried in this country and the United States. The neuro-vascular system and the muscular system is very materially stimulated by the application of the hot and cold douches and baths. A suitable hot douche (axe-douche) followed by a cold douche acts as a powerful tonic to the nervous system. Many hysterical phenomena are successfully treated by hydrotherapy. Cold and hot wet packs are excellent and in many people hot baths <u>calm</u> and <u>allay</u> the irritable and unstable Nervous system. Heat is a very effective agent for the treatment of contractures and hysterical spasms. Remember that hydrotherapy is properly carried out has bracing and soothing effects on the nervous system. Apply the douche at first at a temperature of 80° F., later 50° to 60° F., to the trunk and limbs for 15 to 20 minutes. Douche two or three times daily and avoid douching the head and neck. Follow up the douching with brisk rubbing to promote a reaction.

Psychotherapy as a therapeutic agent in Hysteria.

Hypnosis and psychotherapeutic methods are very successful in many well chosen cases and act remarkably well when judiciously practised under the inspiring personality of an able physician. These methods, suggestion (auto-and hetro- suggestion) and hypnotism, occupy a very prominent and important position in the treatment of Hysteria. Employ these methods as adjuncts to the other various lines of treatment, to evoke dormant centres, to soothe and allay irritable centres and to educate the patient to habits of self-control and right behaviour. Use your influence and personality and endeavour to attain your object of psychotherapy, i.e. cultivate the will and self-control of the patient over her unruly emotions and unstable reflexes. Encourage her by firm but gentle methods of persuasion and suggestion that her paralysis, excitements, will all disappear by degrees. In paralyses tell your patients that the lost movements can be re-educated, and in cases of paraplegias induce your patients to take a step or two every hour and thus interest themselves in their rapidly improving conditions.

"Suggestion" in Hysteria.

Babinski defines suggestion as "the action by "which one endeavours to make another accept or real-"ise an idea which is manifestly unreasonable." Apply persuasion when the ideas are <u>reasonable</u>. Many writers mean by "Suggestion" the introduction of mental associations and modifications of the patient's mental state leading to betterment and improvement. This is a most powerful weapon in the hands of the physician, especially when the patient has "faith" in the doctor. "Suggestion" is carried out in two distinct ways - (i) By mild methods of persuasion, and (ii) By strong imperative commands.

"Hypnosis" (Hypnotism) in Hysteria:-

This is most undoubtedly useful in the treatment of Hysteria. You throw the patient into an artificial sleep and in that condition the patient is capable of receiving suggestions from you. The majority of Hysterical patients can be hypnotised, but remember that this hypnosis alone can hardly be a cure. A good many hysterical patients are not easily hypnotisable but even such patients derive benefit from passive suggestions where the patient is taught to place the body and the mind in a state of absolute and profound rest and relaxation, thus giving stability to the unstable, irritable and excitable reflex centres. Auto-suggestion is of great value. This is the persuasion of self that one is really almost well, and that there is nothing vitally wrong. The mind can exercise the greatest influence on the body and this has been amply recognised from the earliest times. By the influence of the will over the bodily sensations the patient becomes well by suggesting to herself with force and firmness and frequency that she is well and free from pain. This principle of the "Influence of the mind upon the body" forms the basis of several of the modern "religions" and "cults." The bodily sensations are under the potency of the will

and can be regulated by it. The patient can be taught or made fit to neglect, to take no notice of, or to discard her "morbid sensations."

"Isolation" from home and from friends.

It is most important to remove the patient from the environment and conditions under which the disease arose. This isolation at once relieves the patient of the "worries" and she soon gets used to new surroundings and new channels.

Isolation means not only mere removal from home but the complete cessation of all communications with relations or friends, either by letters or personally. No visitors, especially sympathetic and weak-minded visitors, are to be allowed to see the patient. The patient herself should neither write nor undertake to send any letters away to her people. Forbid all sympathetic memifestations and place the patient in the <u>entire</u> charge of an intelligent nurse.

Treatment of the Vaso-motor Mechanism.

Use such Vaso-constrictors as Ergot, etc., and Vasodilators such as pilocarpine and nitrites, and drugs acting on the blood such as calcium chloride, Arsenic, Iron, etc.,. This treatment of the Vasomotor apparatus is valuable and strongly indicated in any noticeable irregularity of the Vasomotor

regulator mechanism, or in cases where there is dilatation or constriction of the vessels of the Central Nervous System, or when other remedies have failed. E. Merck of Darmstadt has put up a soluble calcium Salt named "Kalazine." This is especially used for intramuscular (gluteal) injections, and I have got excellent results in two cases of hysteria. Both these patients had severe hysterical seizures and were cured by the administration of Kalazine, intramuscularly. Each patient received about six injections of Kalazine, and in my opinion calcium salts (especially if given as a soluble salt in the form of Kalazine) has a profound action on the blood and nervous system and arrests hysterical seizures. Flushings of the face, disagreeable obscure sensations all over the skin, sudden contractures of the field of Vision and dermatographia, are very satisfactorily cured by the following prescription: -

Rx	Extracti Ergo	tae	•	•	•	gr.	3
	Haemamelidin	•	•	•	•	gr.	12
	Hyoscyamin					gr.	250

Give these pills three or four times daily. <u>Ergot</u> exercises a strong influence on <u>irregular</u> <u>Vasomotor action</u>. Calcium Chloride can be given by the month (20 grains three or four times daily),

or far better, given intramuscularly (in the form of Kalazine of Merck) as I have indicated above. Injections of "Fibrolysin" are also excellent in some cases. These have a profound action on the blood causing "Leucocytosis." and improving circulation. and removing any irregularity of the vasomotor mechanism. Dr Felix Mendel, of Essen, combined one molecule of thiosinhamine with half a molecule of salicylate of soda, and formed a white crystalline substance called "Fibrolysin." This drug, apart from causing a very pronounced destruction and abscrption of exudates and cicatricial tissue, has further potent activities. It has a profound action on the blood. After its injections into the tissues there is a temporary, but considerable diminution of the leucocytes in the blood. This diminution is however followed by a great excess of white blood corpuscles (Leucocytosis which may amount to thirty, forty or even fifty thousand in one per c.mm. of blood). Further the patient knows she is getting some special treatment, and this has a great "Mental effect," which is so beneficial that it improves the body.

The use of Fibrolysin in general medicine has been recognised by numerous authorities; this use being based rationally on the pathology of the

diseases and the pharmacology of the drug. Friedlander, for instance, has employed thiosinhamine with success in a case of thickened pleura, associated with fibroid lung. Mendel cured pleuritic adhesions by the intravenous injections of Fibrolysin. Ross has used thiosinnamine in heart disease. He was favourably impressed by it in three cases of mitral insufficiency of inflammatory origin. In cases of chronic aortitis with a double murmur or a systolic murmur only, in aortic regurgitation and stenosis, the constant result of thiosinnamine medication was to reduce the dyspnoea. Neuritis and neuralgia share in the benefits afforded by Fibrolysin. I propose that some cases of hysteria, especially hysteria in young women who have a poor circulation and an irregular vasomotor mechanism, be given a regular course of Fibrolysin treatment (from 20 to 30 injections - one injection every other morning or night). The effect is very satisfactory, both as regards the "mental" state, and also the effect on the blood (leucocytosis).

Let us again consider for a moment the effects of calcium chloride. Successful administration of this drug increases the coagulability of the blood, and many <u>nerve</u> symptoms, aeroparaesthesics, shakings, tremor, defective circulation, hot flushes, etc., are improved if not actually cured by the administration of calcium (either by the mouth as calcium chloride or intramuscularly as "Kalazine"). Nervous symptoms are especially amenable to the action of ergot. It has been proved by many writers who have considerable experience of hysteria that ca.cl₂ has a marked effect upon the attacks of "Trance." Use also ichthyol, atropin, ovarian and thyroid extracts.

Etiological treatment: treatment of the Determining Causes of Hysteria.

These methods though not adequately recognised are most important in the scientific treatment of this disorder. The other methods are more or less <u>empirical</u> for they treat the disordered nervous system only. It is much more rational to study the accidental or determining causes of an hysterical manifestation. For this a thorough understanding of the <u>physiological</u> functions is most essential. It is now acknowledged that the "sympathetic vasomotor systems" are the dominating fields of operation of the reflex instabilities and irritabilities evidenced in Hysteria. Nothing more can alter or influence these centres than the "condition of the blood" (Hence it has been rationally and scientifically proposed to use Vasodilators, Vasoconstrictors and other drugs which have a <u>definite action</u> on the <u>blood</u>). Does it not follow that correction of blood conditions and alterations, constitutional disorders, and derangements of metabolism will materially tend to cure the condition of Hysteria? Hysterical stigmata such as "Erythematous mottling," "pruritis," "dermatographia," "general neuromuscular irritability," "twitchings" of the limbs at night, or other symptoms suggestive of toxaemia are due to <u>alterations in the blood</u>. "Paroxysms of urticaria" may lead to, or be associated with "Paroxysms of Hysteria." These <u>skin symptoms</u> and <u>nervous paroxysms</u> appear and disappear together. Give such patients cascara, arsenic, bromides and alkaline carbonates.

<u>Certain blood disorders</u> (toxaemias) may act as determining factors or causes of many a <u>hysterical</u> phenomena. Such toxins may be due to <u>syphilis</u>, <u>phthisis</u>, scarlet, acute rheumatism, pneumonia and typhoid fever, etc. Other toxins, may they be organic or metallic, such as lead, Hg, alcohol and CS_2 may act also in the same manner. Anaemia and the toxins associated with it also produce hysterical symptoms. Such <u>nervous attacks</u> due to anaemia often cease on the administration of iron and ergot. Professor H. Oppenheim regards Hysteria as a pure veterate sinner told all secrets to the forgiving and sympathetic priest. This method is excellent and yields good results in carefully selected and young patients, but it is a trying method alike to the doctor and patient, and takes up so much time. Telliffe writes thus in "System of Medicine" -

"His (Freud's) general procedure is to take "the patient in a recumbent position, the physician "sitting behind the patient's head at the end of the "lounge. The physician thus remains practically out "of sight of the patient, who is then asked to give "a detailed account of his troubles, and to say "everything that comes to the mind, irrespective of "its seeming logic or sense, and apart from dis-"turbing, mortifying, or unnice suggestions. In all "such histories, gaps are inevitable. These the "patient is urged to fill in by thinking closely of "the attendant circumstances, speaking aloud all of "the flitting thoughts that pass during this search "("free association"). All the thoughts are re-"quested to be uttered, notwithstanding their dis-"agreeable nature. The patient must exercise no "critique and remain passive. It will be found that "the disagreeable thoughts are pushed back with the "greatest resistance. This is made all the more "striking since the hysterical reacion, i.e., the

"symptom, is the symbolic expression of the realiza-"tion of a repressed wish and gives the patient some "gratification. A great effort is made to retain "the symptom, especially as its origin is not really "perceived, and since it represents, in symbol, the "individual's former conscious strivings. In psycho-"analysis one attempts to overcome all of these re-"sistances, and by a series of judicious and tactful "probings, reconduct into the patient's consciousness "the hidden thoughts which underlie these symptoms. "Every symptom has some meaning; behind it there lies "some associated mechanism, the origin of which the "patient unconsciously or partly consciously represses. "In the psycho neurotic symbol may be read the cryp-"tic expression of the original thought driven back "and hidden."

"To slowly analyse and pick apart the mechanism "is the object of the analytical method. One needs "not only special tact for such excursions into the "subtleties of the mental life of some individuals, "but also a developed method of interpretation. "Every act, every symbolic expression or action, "lapse in speech, mannerism, needs to be carefully "noted and its bearing co-ordinated. Freud lays "particular emphasis on the analysis of dreams, since "he believes that in the dream the subconscious, or "the "repressed conscious" is more apt to reveal "itself. Hence a careful reading of Freud's 'Signi-"ficance of Dreams' is of the greatest value in this "study, also his 'Psychopathology of everyday Life.' "In his work on dreams he has developed to the full "the chief directions along which his mind has "travelled in the psychoanalytical method."

It is of the utmost importance to trace back "into the earliest years the striking emotional in-"fluences that have come into experience, as, for "Freud, the hysterical reaction consists in a per-"verted type of reaction of these experiences. As "is known, the blurring or loss of an emotional in-"fluence - an affect, in short - is due to a number "of factors. In normal life forgetting is the common-"est type of a corrective adaptation, and forgetting "is carried out with special ease if the emotional "stress has been excessive. Forgetting however is only "a secondary phenomenon, and usually is more success-"ful if the immediate reaction has been an adequate "one. Such immediate reactions express themselves "as tears, as anger, as impulsive acts, etc., etc., "and in such reactions the effect is discharged. In "everyday life one calls it giving vent to one's "feelings. If, however, the reaction is suppressed, "the effect becomes united to the memory of the

"psychosis," and says "the pallor of hysterical "(nervous) individuals is not always a sign of anaemia, "but may be due to vascular spasm." Remember this condition of vascular or angiospasm. Alterations in the blood and nutrition caused by bad surroundings, insufficient food and clothing, also determine hysterical symptoms. Thus it is important to keep accurate records of the weight of hysterical patients. Gastrointestinal derangements play a great role in the production of hysterical symptoms. General intention tremor is seen in some cases (young women as a rule) and sometimes it is impossible to diagnose hysterical tremor from disseminated sclerosis. This hysterical tremor not infrequently is due to gastro-intestinal disorders. Bolting of hot food and consequent constipation very often lead to the derangement of the gastro-intestinal tract which, when suitably treated both by prophylactic methods and therapeutically, results in the recovery of the symptoms such as nystagmus, tremor, etc. Some cases of real hysterical tremor are determined by oral and gastro-intestinal sepsis which, when remedied, causes the disappearance of hysterical manifestations. This gastro-intestinal sepsis plays a great role in the production of hysterical symptoms and even such a simple remedy as the giving of

castor oil or other aperient at bedtime causes such hysterical symptoms as <u>globus</u>, <u>dazed feelings</u>, <u>tremors</u>, paresis of limbs, etc., to disappear. Pay the greatest attention to oral sepsis and gastrointestinal sepsis. You can thus help many hysterical cases by keeping away the unpleasant sensations and disagreeable symptoms. Pay particular attention to pyorrhoea alveolaris, and always keep the bowels clean.

Educational treatment in Hysteria.

Educational measures are of great value when we are well aware of the inherent and hereditary nature of the complaint. Many hysterical subjects have a brilliant intellect although some are stupid and silly. Careful education is the most important factor. In both hysteria and neurosthenia always try to educate your patient. Read Weir-Mitchell's work and his system. It is not a mere rest cure as many think but an elaborate system of re-education. Many hysterical patients are refined and excellent women and are leaders of charity and philanthropy, while others are narrow minded, jealous, and cranky. The greatest and fundamental point in the education of hysterical people is the <u>cultivation of the will</u> and self control. Subject the subordinate unruly reflex centres and emotions to their supreme master "Will and self-control." Teach your patients with firmness and tact to bridle their passions and neglect small disagreeable sensations. Do not lose temper or get angry with them. Use your personality and change patients' mental condition by suitable and selected literature, careful conversation, and suggest topics for thought. Give a plain, simple but stimulating diet, a regular life free from anxiety, worry, and excitement, combined with recreation and abundance of fresh air and exercise. The temptations, the turmoil and trials of town life are most injurious to many a young hysterical woman. As the baby grows up check effectively any tendency to introspection. There are two fatal ways in which the fancy of young women is apt to take, i.e. love affairs and religious dogmas. Watch these carefully. Cultivate in them the qualities of gentleness, meek resistance to the petty trials of everyday life, pity, and self-sacrifice. Try to form in them "character" and self-control as many of these hysterical girls are emotional and selfish to an extreme degree. Every careful and far seeing mother will fail not to gently and wisely unfold to her girls the various dangers and sex questions. Judiciously warn them against

self abuse and illicit gratification with others. Relate to them narratives of great and ideal lives. It is far better to exclude those girls of neurotic origin from the society of boys, more especially during the critical period. i.e. during the four or five years that puberty becomes established. Never give alcohol to neurotic and hysterical subjects for they soon form the evil habit - if not, even a small quantity of alcohol affects them injuriously. Mothers must always endeavour to "train" their children for some definite occupation within their capacity and according to taste or necessity. It gives them an objective in life and an interest in themselves, for they can turn round and say "This is my occupation" - "this is my profession or calling." Remember that this training in a definite direction is most valuable for those subjects who have an irritable and unstable nervous system. This "training" inculcates in them habits of punctuality, method and orderly self reliance. This training takes the hysterical subjects out of themselves and fulfils two great objects of education :-(1) The avoidance of introspection; (2) the cultivation of intellect. Moreover this particular and definite training gives them an "ideal" for which to live, and a purpose and meaning in life.

Never educate neurotic girls at home. Avoid schools in large towns and cities, and endeavour to get a "home" boarding school. Secure for them quiet and peace and a place with plenty of fresh air, and where healthful exercises could be indulged in. Get a school where the teachers are selected rather for character than for academic attainments. Let hysterical girls freely indulge in athletic exercises and games without overdoing them. These exercises and games develop the body, and create the love for fair play, for honour and for thoroughness. Some patients, especially girls, may overdo these games and exercises through excess of zeal, through over-activity, and over tension. Inculcate in such girls the absolute necessity of physical and mental rest, the "power of repose" in contra-distinction to their imbibed ideas of the necessity of rigid and disciplined exercises for the health of the body, and of concentration for the accomplishment of intellectual work. Train their minds to "concentrate" the attention, and let their hours of serious study be as short as possible. Give them lessons in self denial, self sacrifice, thoroughness, thrift and economy. Cultivate in them devotion to some great ideal, impersonal and unselfish, which will in after life prevent undue prominence and influence of the lesser and selfish emotions

engendered by daily worries and troubles. Let people with hysterical diathesis have a steady belief in some one ideal and this belief offers the surest hope for the safety of the unstable mind. Cultivate in them outside interests, and always discourage introspection. Teach her to be loyal and enthusiastic both alike to her school and her school fellows. "Complete isolation from the family circle of sympathetic friends" is the only effective way of dealing with many troublesome and hysterical manifestations. This procedure becomes all the more imperative when the mother herself is hysterical. Place such hysterical boys or girls in charge of a suitable family or in the home of a judicious teacher. Marriage is a valuable adjunct and may prove redemption of these patients not by the gratification of the "sexual desires" and sexual passions, but by removal of the hysterical subject from unhappy surroundings, by giving the patient fresh interests in life and by cultivating in her self-control, self-sacrifice, unselfishness, and companionship.

The analytical or cathartic method of Reeducation.

This was introduced by Brewer and widely practised by Freud. It is in reality the old classical "confessional method," in which the "experience, and an emotional complex, or, to use a "rather broad simile, a psychic boil, results, which "must heal by absorption, by discharge, or by other "means. Freud uses the term "ab-react" (abreagieren) "to signify the adequate reaction, or discharge of "such effects or their resulting complexes. Taking "the whole thing over, giving vent to one's secrets "and confessions are well known abreactions."

"In hysteria certain of these complexes remain "prominent; they are neither reacted too promptly, "nor is their unpleasant feeling tone diminished by "the blurring process of forgetting, although it is "characteristic of the Freud point of view that the "actual experience which gives rise to them becomes "forgotten, and the cause of the affect disturbance "which becomes later converted, it may be into "physical signs, remains apparently unknown to the "patient. It must be dug out of the psychoanalysis "and when once discovered catharsis takes place, and "the patient becomes cured." A STUDY OF THE NERVOUS AND MENTAL DISEASE CALLED HYSTERIA WITH SPECIAL REFERENCE

TO

SYMPTOMATOLOGY, PATHOLOGY, AND TREATMENT.

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