ALTERATIONS IN THE MORROW OF BONES IN PERNICIOUS ANEMIA.

Cohnheim has lately described a case of pernicious anemia, observed in the hospital at Breslau (Archiv für Path. Anatomie, Bd. lxviii. Heft 2), in which, in addition to the characteristic alterations in other organs, the marrow of all the bones exhibited peculiar changes, visible even to the naked eye. The marrow was of an intensely red colour, and it was found, when examined with the microscope, that it contained scarcely any fat cells, but instead (1) large numbers of colourless corpuscles, of which many resembled lymph corpuscles, and many others had an epithelial aspect, and contained one or more large nuclei; (2) a large number of coloured corpuscles, the most remarkable of which were those which contained nuclei, which, like the cells, were coloured red. Nucleated red blood-corpuscles were also detected post-mortem in blood taken from other parts of the body, though none had been discovered in it during the last week of life.

—Med. Times and Gaz., March 10, 1877.

THE MINUTE ANATOMY OF SCARLATINA.

At a recent meeting of the Pathological Society of London, Dr. Klein read a paper (Med. Times and Gaz., May 5, 1877) based upon his researches on this subject. He said that he had examined in all twenty-three cases of undoubted scarlatina, dying from the second to the forty-second day of the disease, specially investigating the state of the kidney, liver, spleen, and lymphatic glands. The results of his observations on the throat and skin would not be published on the present occasion. The duration of the disease between the extremes above stated was as various as possible. Most of the subjects were between the ages of two and twelve; but one was as old as thirty-eight years. First, with respect to the kidney. This organ was examined in twenty-three cases. In the first week of the disease the vascular and glandular parts of the organ presented the following changes: 1. The nuclei on the Malpighian bodies were increased in number. 2. The intima of the minute arteries had undergone hyaline degeneration; they were swollen into cylindrical hyaline structures, with narrowing of their lumen. At the same time, larger or smaller portions of the glomeruli became impermeable—hyaline at first, fibroid afterwards; while Bowman’s capsule also appeared hyaline. These changes were constant. 3. Another early change was multiplication of the nuclei of the muscular coat of the minute arteries. This was observed in different parts of different arteries, but especially at the point of their entrance into the glomerulus. 4. Parenchymatous nephritis—swelling and multiplication of the nuclei of the muscular coat of the minute arteries. This was observed in different parts of different arteries, but especially at the point of their entrance into the glomerulus.
tion occurred in the arteries was typhoid fever. Next, with respect to the muscular fibres, there was no doubt that the nuclei were increased, that they belonged to the muscular fibres, and that they did not come from migrated cells; but there was some difficulty in deciding whether this proliferation was accompanied by increased size of the muscular fibre or true hypertrophy. Against the existence of true hypertrophy were its early appearance, and the absence of sufficiently extensive disease of the capillaries to account for such wide-spread arterial enlargement. Klebs had described cases of scarlatina dying early of anuria, in which the glomeruli were found pale: the urinary tubules frequently not changed; and neither interstitial inflammation nor signs of catarrh present. There was, therefore, in these instances little beyond congestion to account for the symptoms. With such cases Dr. Klein had not met; he observed nuclear increase in all his specimens, and if no lesion were found he would be inclined to account for the anuria, not by compression of the capillaries, but by extreme contraction of the arteries from the action of some poison in the blood. The parenchymatous (tubular) changes were at first very slight, and quite local. After the first week of the disease, the changes might be described as (1) infiltration around the tubules, commencing in the tissue about the large vascular trunks; and (2) parenchymatous nephritis, the tubules being crowded with lymphoid cells and hyaline cylinders, and the epithelium presenting fatty degeneration. Of these two changes, the interstitial infiltration occurred first between the medullary rays, and afterwards spread to the cortex; in some cases the resulting growth resembled adenoid tissue. In one case, that of a child of five, dying on the thirteenth day of the disease, the interstitial change was advanced, and emboli were found in the arteries, consisting of fibrine and a few cells. In all cases the infiltration was accompanied by swelling of the kidney and parenchymatous change. Dr. Klein said that, while many observers had described interstitial nephritis as rare in early scarlatina, he considered it a regular lesion. Secondly, with respect to the lymphatic glands of the neck, it was observed that in scarlatina the uninuclear cells of the central parts were greatly diminished in number, and that their place was taken by large multinuclear cells, with intermediate forms; while the peripheral parts of the glands were occupied by crowds of ordinary lymph-cells. Fibrinous thrombi occurred at the same time in the bloodvessels, and giant-cells were found. Further changes were in the direction of fibroid degeneration. In the liver, which was examined in eight cases, Dr. Klein discovered (1) granular opaque swelling, or even fatty degeneration, of the hepatic cells; (2) a change on the arteries similar to that described in the renal vessels; and (3) great thickening of the interlobular connective tissue of Glisson’s capsule. These appearances were well marked in a case of only two days’ duration. The spleen presented (1) enlargement of the Malpighian bodies; (2) hyaline degeneration of the intima of the arteries; (3) distinct multiplication of nuclei of the muscular coat of these vessels; (4) adenoid growth around the arteries; and (5) infiltration of the lymphatic follicles with large hydropic cells. In conclusion, Dr. Klein said that, besides the preceding changes, he had observed a swollen, hyaline state of the basement membrane of the trachea, and of the elastic tissue of the vocal cords. It was interesting to remember that this tissue, so extensively affected over the body in scarlatina, was one specially resistant to the swelling effect of reagents.

Dr. Murchison, in thanking Dr. Klein for his communication to the Society, remarked that he seemed to have shown that what was generally considered to be a purely desquamative disease, the renal complication of scarlatina, was really complex, including also changes on the arterial walls and on the connective tissue of the organ. He wished to know whether Dr. Klein considered that these changes disappeared in cases that recovered; and, if so, how? Another question, inter-
Dr. Greenfield said that Dr. Klein's observations closely corresponded with some that he had made himself in the course of examination of twenty-five collected cases. He had further had the advantage of studying the morbid anatomy of scarlatina under Professor Charcot, in Paris; and Charcot had said that he believed that interstitial nephritis occurred as a lesion in the disease. While he (Dr. Greenfield) could personally confirm most of Dr. Klein's statements, he had to add that, in some cases, he had quite failed to find evidence of interstitial change. He had observed the affection of Glisson's capsule in the liver; and it was remarkable how firm the liver felt, even to the hand, in the sixth or seventh week of scarlatina. He was less acquainted with the changes in the spleen. The appearances in the lymphatic glands of the neck closely resembled those found in diphtheria; and Dr. Greenfield believed that all these changes described as found in scarlatina were not specific, but the result of inflammation. Even in the kidneys the same lesions had been seen by him in typhoid fever and in diphtheria.

Dr. Moxon said he must confess that Dr. Klein's results were more new to him. In general hospitals their experience of fatal scarlatina and acute renal disease was rare; while the large white or congested kidney was more familiar, inasmuch as it was of older standing. He did not remember having ever seen Dr. Klein's phenomena; and he had not associated clouds of corpuscles around the Malpighian bodies with the acute changes in this state. He had, however, long looked for a pathological explanation of the clinical difference between the acute Bright's disease of scarlatina, and that due to other causes—how the former disappears, but the latter not. Could Dr. Klein give any explanation of this? In specimens of ordinary tubal nephritis carefully prepared he had never seen much evidence of exudative nephritis; perhaps the cases had been too advanced. He wished, in conclusion, to ask Dr. Klein how he could identify as an embolus the material found in an artery post-mortem.

Dr. Klein replied: With respect to the President's questions, he had one case in an adult, fatal on the forty-fourth day, of pneumonia: in it the parenchymatous and interstitial changes in the kidney were both slight; and, comparing this with the other cases, he had concluded that it was recovering from the interstitial disease. As regards albuminuria, some of the patients had had none, and yet post-mortem the urinary tubules presented casts and advanced disease. He accounted for this by suggesting that the albumen remained arrested in the kidney, and did not pass into the urine. Dr. Klein said that he was glad to hear from Dr. Greenfield that his researches had been confirmed by other pathologists. Of course cases occurred where no interstitial disease could be discovered. At first there occurred a small deposit of cells around the vessels, and then these went on increasing. All persons dying of scarlatina presented at least as much as this. In reply to Dr. Moxon's question regarding embolus, Dr. Klein said that when an artery presented within it at the point of its division a bit of fibrin, filling it, and causing dilatation with accumulation of blood behind, while the branches in front were small and empty, he concluded he had before him an embolus, and not a post-mortem product.

Salicine in the Treatment of Rheumatism.

Mr. A. D. L. Napier, in a short article on the action of salicine contributed to the Practitioner (June, 1876), thus speaks of his experience with this drug in rheumatism.
The form of rheumatic disease for which I have most frequently ordered salicin is the arthritic, and in these cases relief was almost invariably experienced. In one case of severe arthritis of the left finger, wrist, and ankle joints, decided benefit attended the exhibition of a fifteen-grain dose, and, though the disease was of six days' standing, complete relief from pain was experienced after three other doses. In such cases I have repeatedly seen reduction of pain, redness, heat, and swelling about an hour and a half after the administration of a twenty-grain dose.

The salicylate of soda, in addition to its general action in lessening arterial tension, acts frequently as a powerful diaphoretic, producing increased perspiration, large flow of urine, and in some cases an increased quantity of saliva. These latter effects seem to be more often caused by the soda salt than by the acid. Although swelling frequently is materially decreased in a short time by salicine, yet in some cases this is not so: I have a patient at present, who suffered from rheumatic arthritis of the wrist-joint, treated by salicylate of soda, and relieved of all acute pain, more than a month ago, whose joint is still greatly swollen, and useless for all active exertion; he is now rapidly improving under galvanism.

Symptoms exactly similar to cinchonism may follow the prolonged use of salicine. An old gentleman, who was under my care suffering from rheumatic affection of the wrist and ankle joints, was ordered twenty grains of salicylate of soda every two or three hours; a few doses speedily cured him. He ceased taking the drug, and was again similarly affected, about ten days after his first attack; the drug was resumed, and he was recommended to continue it for a fortnight, in ten-grain doses twice daily, after all symptoms had disappeared. He only used it, however, for two or three days. Within a short time he again became ill, and, having experienced the decidedly beneficial action of his former medicine, resumed taking it without sending for medical advice. On this occasion, evidently desiring to make assurance doubly sure, he persevered in taking twenty grains every three hours for more than a week, although the pain had almost ceased after two or three doses. He then became very deaf, had ringing noises in the ears, experienced severe headache, thirst, loss of appetite, and felt dull and heavy. The medicine was discontinued, and the unpleasant symptoms shortly vanished. It is necessary for the perfect action of salicine that the drug should be used in reduced doses for some time after acute symptoms are dispelled; I have often seen a relapse from too early cessation of the medicine.

In muscular rheumatism, salicine affords some relief, but its action in such cases has given uncertain results in my hands. In neuralgic affections, I have seen good from salicylic acid, more especially in mixed cases of neuralgia and rheumatism; one case of neuralgia of the brachial plexus was undoubtedly cured in a very short time. From its greater solubility, and from its being more easily taken by the majority of patients, I have found salicylate of soda preferable to the salicylic acid. With the exception of the greater diaphoretic action of the former, I have been unable to discriminate between their therapeutic action.

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Atrophy of Portions of the Brain after Amputation of the Arm.

At the meeting of the Société Anatomique, November 10th, 1876 (Progres Médical, Feb. 10th, 1877), M. Chuquet brought forward the following case: Anche, aged 30, a waiter, was admitted into the temporary hospital on November 4, under M. Chuquet, with all the signs of ataxo-erythematous typhoid fever, and died on the 6th, without presenting any remarkable phenomena. This man, in 1870, was a cuirassier, and received many balls at Reichshofen, one of which broke his left arm, and necessitated amputation. Another fracture existed at the
upper end of the right humerus; this limb was preserved. When the patient was brought to the hospital, a little pus flowed from a fistulous opening situated on the external part of the upper extremity of the arm. We learnt that on this side the cure had never been complete. The necropsy was in many respects remarkable. As far as the typhoid fever was concerned, the lesions were classical, and do not require attention. The arm where the amputation had been performed presented two large neuromata. The anterior one was formed by the union of the musculo-cutaneous, median, radial, and ulnar nerves. The brachial artery and the humeral veins, by their external coat, were joined to the mass, and the whole formed a lump as large as a small nut. Another smaller neuroma was formed by the radial on the posterior aspect.

On the other side, at the upper part of the humerus, were traces of an old fracture of the surgical neck; and there was a channel made by the ball, with an external and an internal orifice; the internal being the wider. In the cavity and around the fracture the tissue was lardoceous, and a fistula led to a small suppurating point. The ball was sought for fruitlessly for a long time, when, on cutting through the vertebral lamina, a hard body was encountered, which was the long-sought ball. It had traversed the upper extremity of the humerus, had glided along the curve of the ribs, and had lodged behind the spine among the muscles, where it had set up no action, and caused no pain.

On examining the two convolutions which form the fissure of Rolando, there was manifest atrophy of one of them. It had its seat in the superior layers of the right ascending parietal convolution, not involving the fold which unites the ascending parietal convolution with that of the superior parietal lobe. A considerable space was left between this convolution and its neighbours, and the thickness of this convolution was lessened. This reached only to a third of the neighbouring convolution, or of the corresponding convolution of the opposite side, or even of the lower part of the same convolution. The atrophy extended in length exactly two centimetres. The diminution of volume of the convolution was made evident as follows: On looking at the posterior part of the brain, placed on a level with the eye, the part appeared as if depressed. On placing a flat surface on the two convolutions next to the atrophied one, between its summit and the lower aspect of the flat surface was a space of two millimetres; while on the other side the flat surface placed on the corresponding point of the ascending parietal convolution oscillated markedly in touching one or other of the neighbouring convolutions. On measuring the size of the atrophied convolution in its upper third, it was found to be 6 millimetres. The size in the middle part was 9 millimetres.

The right ascending parietal convolution measured 9 millimetres in its upper third. There was then, in a length of two centimetres, a marked atrophy both in height and thickness. The right paracentral lobe presented a diminution in volume, though relatively less considerable. Taken as a whole, its length was less by three millimetres than that of the paracentral lobe of the opposite side. The atrophy was most marked on the side corresponding with the parietal convolution.—London Med. Record, May 15, 1877.

Effects of Cutaneous Faradization in Hemianesthesia of Cerebral Origin.

Dr. J. Grasset, in a memoir contained in the last part of the Archives de Physiologie for 1876, corroborates the remarkable observations of Vulpian on the effects of the application of induced currents of electricity to the skin in cases of hemianesthesia of cerebral origin. Like Vulpian, M. Grasset finds that a return of sensibility takes place, and that even a condition of hyperalgesia may be established, as a result of the application of such currents to quite a limited region of
the affected side, as the forearm. Not only is there a return of the ordinary
tactile sensibility, but other senses that may have been affected are, temporarily
at least, restored; thus, the senses of sight and taste were recovered in one case
during the application of the current. This is an interesting result, confirming or
elucidating the nature of the amblyopia, which in these cases does not correspond
to any lesion of the fundus of the eye. The result obtained by the electrization
of one forearm can be equally satisfactorily obtained by the application of elec-
tricity to any other circumscribed region of the anaesthetized side. The same
result may also be obtained by electrifying, not the affected side, but a limited
region of the sound side. The sensibility of the affected side is always exag-
erated and rendered normal, and a condition of hyperalgiesia is established in it.
The degree of hyperalgiesia developed in the paralyzed side is always very con-
siderable during the first day of applying the electricity, but the second day it is
less marked, and the third day it is scarcely perceptible—that is to say, M. Grasset explains, the electrization always restores the sensibility of the anaes-
thesitized side, but only causes well-marked hyperalgiesia on the first day.—Lancet,
March 24, 1877.

The Trembling in Parkinson's Disease (Paralysis Agitans).

M. Charcot, in a recent lecture on paralysis agitans (Progrès Medical,
December 2, 1876), particularly insisted on the following points.

1. The name paralysis agitans is incorrect. The term paralysis cannot be
properly applied to an affection in which the muscular power is preserved for a long
time. The affix agitans is not absolutely correct, because the trembling is absent
in some cases in which the correctness of the diagnosis cannot be questioned. He
proposes to call the affection Parkinson's disease, after the English physician who
first drew serious attention to it.

2. M. Charcot maintains that, as a rule, the head and neck do not take part in
the tremor which affects the limbs and trunk. In those cases in which the head
is observed to tremble, oscillations are evidently communicated to it from the
trunk. To prove this, he fastened a small stick, to the end of which a feather
was attached, to the forehead of a patient. When the patient was left alone, the
feather was in a state of unceasing agitation; but when the movements of the
upper limbs were arrested in some way, as by forcibly elevating the arms and
trunk, the feather was perfectly still. This experiment was tried with the same
results on several patients.

3. M. Charcot laid particular stress on the fact that tremor is not a necessary
symptom of Parkinson's disease. There is a form of the disease in which the
tremor is so slight that it is not perceived by the patient, or in which it does not
appear till after three or four years, or in which it is even entirely absent. M.
Charcot gave in detail the histories of two cases in which all the symptoms of the
affection were present, and had attained considerable intensity, with the excep-
tion of the tremor. This was entirely absent in one of the cases, and in the
other was confined to a slight trembling of the left hand, of which the patient
himself was entirely unaware. Even this slight tremor was of recent develop-
ment, while the other symptoms of the disease had existed for four years.

In some cases, in consequence of the stiff attitude of the patients, of the ex-
reme slowness of the movements, the expressions of hebetude, caused by the
immobility of the features, the involuntary flow of saliva, and the interference
with speech, the affection has been mistaken for softening of the brain. Usually,
when this error has been made, the rigidity was especially marked on one side.
The intellectual faculties, however, remain intact in Parkinson's disease.—Lon-
don Medical Record, March 15, 1877.

Thanks especially to M. Charcot, we are now familiarized with the possibility of spinal cord disease consecutive to brain disease. This great teacher has the rare felicity of gathering around him fellow-workers who carry on and extend by microscopic examination and otherwise his investigations in nervous diseases. M. Pîtres, one of his pupils, has verified in a series of cases M. Charcot's contention that these secondary degenerations of the spinal cord have special relation to lesions of the motor regions of the cortex (Progrès MédicoL, February 17, 1877). A brief summary may be given of the five cases recorded by M. Pîtres:

1. A patient, aged seventy-six, admitted to the Salpêtrière with pneumonia; no hemiplegia. At the post-mortem a large area of old softening was found in the right hemisphere. It had destroyed the posterior half of the island of Reil, the two posterior thirds of the inferior parietal lobule, and the posterior half of the first and of the second temporal convolutions. It will be observed that the softening did not attack the motor cortical region. The remainder of the brain healthy, and the spinal cord did not manifest, either to naked-eye or microscopic examination, any secondary degeneration.

2. A patient, aged eighty-one, admitted for atrophic scirrhus of the breast; demented; no hemiplegia. Post-mortem, there was fibroid obliteration of the trunk of the left posterior cerebral artery, and an old focus of yellow softening in the first and second spheno-occipital convolutions. Corpora striata healthy; no changes in the rest of the brain or in the spinal cord.

3. Patient, aged eighteen, the subject of left hemiplegia consecutive on convulsions which first came on when six years old, during convalescence from measles; partial epilepsy; spasmodic contraction of the limbs of the left side. Death in the epileptic condition, after a series of 297 fits. Post-mortem, a plaque of cerebral atrophy in front of the right fissure of Rolando, involving the ascending frontal and part of the first and second frontal convolutions. The internal capsule of the right side less than that of the left; the same thing held with respect to the right cerebral peduncle, the right half of the pons, and the right anterior pyramid. A longitudinal band of sclerosis occupied the hinder part of the left lateral column of the cord. Besides this, in the cervical region there was a small sclerosed bundle in the internal part of the right anterior column.

4. Patient aged seventy-nine. Right hemiplegia dating from four years of age; spasmodic contraction of the right limbs; sensation preserved. At the autopsy, some old yellow softening, which had destroyed the lower two-thirds of the ascending parietal of the left side. The other parts of the cortex and the great ganglia healthy, but the left half of the pons smaller than the right. Gray atrophy of the left anterior pyramid prolonged down the right lateral column, showing well-marked sclerosis on microscopic examination.

5. Patient aged ten. Right hemiplegia occurring as sequel to infantile convulsions; partial epilepsy; paresis with contracture of the right limbs; sensation preserved. At the autopsy, softening and atrophy of the paracentral lobule and of the quadrate lobule. The softening extended scarcely a centimetre into the upper end of the ascending frontal and of the ascending parietal convolutions. Ganglia intact. Sclerosis of the posterior part of the right lateral column.

In summing up these cases, M. Pîtres points out that we have to do with lesions of the cortex, leaving the great ganglia intact. In the first two cases, where the cord was healthy, although the cortical lesions were extensive they did not involve the motor region of the cortex, and there was no hemiplegia. In the three other cases the cerebral lesions were much less extensive, but they were
sustained in the motor cortical region, and they had determined at the same time both a permanent damage to motility and secondary degeneration of the cord. In workhouse infirmary, as well as in general hospital post-mortems, not infrequently large areas of cerebral softening are found to which the symptoms during life gave no clue. In view of the above researches, it is exceedingly desirable that the locality of these areas should be carefully recorded, and, if possible, that a microscopic examination should be made of the spinal cord.—Med. Times and Gaz., March 24, 1877.

Severe Diphtheritic Paralysis cured by the Continuous Current.

Professor Peter, of the Hôpital La Pitié, has had recently under his care a patient afflicted with paralysis following very acute diphtheria, which is remarkable, not only on account of its severity, but from the success of the treatment employed (Journal de Médecine et de Chirurgie Pratique, March, 1877). The woman was taken, about the middle of last November, with a slight sore throat, probably diphtheritic from the account which she gave of it, which lasted for about twelve days, but did not oblige her to stop work. About a month after the commencement of this attack, on December 20, after a violent fit of passion, the patient felt some signs of paralysis. Paralysis of the soft palate and of the pharynx was complete; food returned by the nose, and swallowing was impossible. Articulation was abolished. There was some marked weakness of sight, and a slight degree of amblyopia. The woman remained thus during seventeen days without taking any food. She was brought to the hospital on January 4, in a very enfeebled state. Esophageal catheterism was practised, and nourishment given by this means, which had to be continued for five weeks. It was not till fifteen days after her admission that electrization was commenced on account of want of the necessary apparatus. The continuous current was employed, applied to the neck for about an hour each day. At the end of three weeks the symptoms of paralysis amended, the patient commenced to eat, and the voice returned at the same time. When the case was reported, the cure was all but complete; but the treatment was continued because the voice was still affected, and liquids often returned by the nasal fossae at the moment of deglutition.

This case is remarkable on more than one account. We see in the first place, that this severe paralysis succeeded to a sore throat so mild that the patient did not even stop work. The gravity of the paralysis is also quite exceptional. It is extremely rare to see the paralysis not only involving the soft palate, but even all the pharyngeal muscles, and to be so complete as to abolish its functions. It is also certain that, if this woman had not been fed by means of the esophageal sound, she would have died of starvation, since the paralysis lasted for some weeks after this mode of alimentation had been begun. Lastly, the good effects of this treatment must be noticed. The continuous current constitutes, indeed, the best method of treatment for paralysis following diphtheria.—London Med. Record, April 15, 1877.

The Râle Mouillé.

Dr. Millon alleges that he has ascertained the presence of a special rôle in pulmonary affections, which he calls rôle mouillé, and which has, in his opinion, the highest importance from the point of view of diagnosis and prognosis. As a diagnostic sign, it denotes the passage of pneumonia to the third stage; that is to say, the transition of red hepatization to gray softening and to purulent infiltration of the pulmonary tissue. As a prognostic character, this sign is a certain and invariable presage of death within a very short time; in fact, patients succumb within ten or twelve hours after its appearance. The following are the
characters of this rôle: It is a moist rôle, in small bubbles of equal extent. These bubbles are a little larger than those of the fine crepitant rôle. They have some points of resemblance to the mucous rôles and some cavernous rôles, but they differ essentially from them in the following respects. First, the rôle mouillé is confined exclusively to inspiration. Secondly, it is much softer and smoother than the mucous and cavernous rôles. Thirdly, the opening or rupture of the bubbles occurs isochronously with inspiration, and produces a sensation quite peculiar and quite homogeneous. Fourthly, there are not, as in the mucous rôle, large and small bubbles, but all are of the same volume.—Brit. Med. Journ., March 31, 1877.

Aphonic Pectoriloquy.

Dr. Henmet, in his Thèse de Paris (7th Dec. 1876) has studied the new indication, given first by Baccelli, then by Gueneau de Mussy, for the diagnosis of the nature of pleural effusions, and has proved its presence in pulmonary affections. The résumé of this memoir is as follows: Aphonic pectoriloquy is the clear distinction of the voice, when the patient auscultated speaks in a low voice. It exists in all the pulmonary affections associated with induration; induration is the condition sine qua non of its production. Thus we hear it in the first stage of pulmonary phthisis, in the second stage of pneumonia; if, in the latter case, the souffle persist. It is also heard in the excavation stage of pulmonary phthisis, but with a peculiar sound. In the first stage of phthisis, when it can only be suspected by antecedents and certain functional troubles, aphonic pectoriloquy may possess a real diagnostic value. It is also heard in pleural effusions, and in pneumothorax. Compression of the pulmonary tissue by effusion in the case of pleurisy, and by air, or the liquid, or both together, in the case of pneumothorax, may, perhaps, explain the mechanism of its production. Finally, as MM. Baccelli and Gueneau de Mussy have proved, it helps in making the diagnosis of the nature of pleural effusions; when aphonic pectoriloquy exists, the effusion is serous; where it is wanting, the effusion is purulent.—London Med. Record, April 15, 1877.

Diagnosis of Aneurisms of the Aorta by the Laryngoscope.

At the Medical Congress held in the autumn of last year, at Turin, Dr. Zawerthai (Archives de Médecine, Jan. 1877), after detailing the various symptoms that accompany aortic manifestation, and dwelling on their little diagnostic value, called the attention of the meeting to the deductions that can be made in such cases from an inspection of the upper part of the respiratory passages by the aid of the laryngoscope. One of these signs, long known, consists in the paralysis of one or both vocal cords, consequent on pressure applied to the recurrent nerve, the other, recently discovered by Schröter, and investigated by Zawerthai, consists in a rhythmical introflexion of the upper part of the trachea, readily perceptible under the laryngoscope. The reading of the paper gave rise to a very animated discussion.—Practitioner, April, 1877.

A Case of Diaphragmatic Hernia, with Incarceration and Perforation of the Stomach.

In No. 13 of the Berliner Klinische Wochenschrift for 1877 (March 26th), Dr. Klingelhoffer, of Frankfort-on-the-Main, records a case of this accident in a young fellow, aged 22, who had previously enjoyed very good health, with the exception of an attack of pneumonia for six weeks in February, 1876. But it appeared, on cross-questioning, that he had for some time suffered from nausea
and hiccup after meals. The present attack came on the 6th August, 1876, after a very hearty meal, which was followed by violent pain in the belly, and vomiting. He was carried home, and complained of difficulty in breathing. On examination, he was found twining about in bed, complaining of violent pains in the pit of the stomach, the pulse somewhat quickened, extremities warm, temperature not above normal, the liver-dullness apparently normal also. The percussion-note was clear over both lungs, specially clear and tympanic in tone on the left side. No cardiac dullness could be made out, but the heart's impulse was very plain in the epigastrium. On auscultation, the cardiac sounds were heard best on the right of the sternum. Over the whole right lung was loud puree breathing, on the left side no breath-sound, and no metallic tinkling. The intercostal spaces, clearly seen on the right side, were not so on the left. The left side felt decidedly distended. The man had swallowed a quantity of whole pepper and some coffee. These were soon vomited up. Pneumo-thorax was diagnosed, supposed to be connected with the previous attack of pneumonia. Morphia was injected (one-sixth of a grain), and more ordered in powder. After a very restless night, he died about 7 A.M. next morning, about sixteen or seventeen hours after the attack. At the post-mortem examination it was found that the whole stomach, the spleen, a great part of the greater omentum, and about ten inches of the large intestine [descending colon] had passed into the left thorax, through a wide opening in the diaphragm. There was no trace of hernial sac; below and in front was the great omentum, then came the large intestine, then the stomach, with copious contents, as well as gas, distending it enormously, and behind this the spleen. The lung lay free, but compressed to about the size of a man's fist. In the pleural cavity a blackish, pulpyaceous, nasty smelling fluid, clearly extrava-sated from the stomach was found; and on lifting the stomach a small perforation, scarcely as large as a lentil-seed, was discovered, through which this fluid had escaped. The great omentum was found to be adherent to the opening in the diaphragm. The esophagus was sharply bent double from its own opening, around the abnormal opening into which the stomach had been drawn. On account of its distension the stomach had to be opened and emptied before it could be replaced; the colon had been returned into the abdomen easily. The abnormal opening was found in the muscular part of the left side of the diaphragm, about three and a quarter inches in front of the esophageal opening, of oval shape, and about three-quarter inches long, and two inches wide; its posterior margin was free, the anterior adherent to the great omentum. Owing to the perforation of the stomach there was pneuco-thorax, from gas escaping from that organ. There was considerable emphysemm of the cutaneous cellular tissue (noticed immediately after death), and also of the serous covering of the stomach. There was a smooth-edged fissure-shaped opening in the diaphragmatic pleura, but it was a little doubtful whether that was produced in the section. Owing to decomposition, it was difficult to say whether the opening in the stomach was an ulcer of very long standing or not. The history seemed to render this impossible.—


Management of the Bowels in Enteric Fever.

At a recent meeting of the College of Physicians of Ireland (British Med. Journ., April 7, 1877) Dr. T. W. Grimshaw read a paper on this subject, illustrated by brief notes of four cases, in which injury had been done by the injurious use of astringent or purgative medicine. He considered that the main point to be attended to is to keep the bowels free, but not too free, and to avoid as much as possible purgatives or astringents. The bowels may be moved four times in the twenty-four hours with advantage to the patient, and they should never be
allowed to remain confined for more than forty-eight hours. The measures he took to promote these objects were generally connected merely with regulation of diet. In diarrhœa, the patient should be fed on boiled milk, with or without saccharated lime-water. Beef-tea should be avoided. Dilute sulphuric acid, morphia or laudanum, and (in extreme diarrhœa) pills of acetate of lead and opium, were the medicines on which he relied. Linseed-meal poultices and stupes of turpentine or mustard were useful auxiliaries, where pain or tenderness was complained of. The treatment of constipation was a more easy affair. He employed a single drug—castor oil—and usually combined it with opium. He seldom gave more than a teaspoonful for a dose; and in many cases but half that amount. In the early stage of the disease, when he found that the bowels had been confined for some days before the patient came under treatment, he at once gave a dose of castor oil. This not only benefited the patient, but in a doubtful case assisted the diagnosis by often producing a characteristic evacuation. Great caution must always be observed in giving meat in early convalescence, as it is likely to produce diarrhœa. He preferred here to begin with chicken broth, then chicken, and lastly mutton. If a rise in temperature occur after a change of diet, diarrhœa might be expected and should not be waited for, but the meat at once discontinued and the milk resumed. In cases of hemorrhage, he had found ergot the most useful remedy, and so far he had never lost an enteric fever case by hemorrhage.

Mr. Hayden agreed with the author of the paper that the administration of saline purgatives was one of the greatest evils in enteric fever. Blistering the ileo-cæcal region, sulphurous acid with laudanum, and morsels of ice were useful remedies. The regulation of diet was all-important.

Dr. Lyons thought that purgatives by the mouth should be tabooed in enteric fever. Enemata were strongly to be recommended. A decoction of chamomile flowers, with the addition of half an ounce of turpentine and the yolk of an egg, had long been used for that purpose in the Hardwick Hospital. He had frequently checked diarrhœa by means of an enema, because it removed matter that nature was struggling to get rid of, there being from eighteen to twenty inches of intestine covered with diseased points, over which everything had to pass. He had not the slightest hesitation in saying, from an experience of many thousands of cases at home and abroad, that it would be far better to have no motions of the bowels in the day at all, after the preliminary diarrhœa, than to have three or four, as Dr. Grimshaw apparently thought unobjectionable. Milk, eggs, arrow-root, lime-water, and Carrara-water were quite sufficient to tide the patient over a long period of the disease. Dr. Doyle remarked that Niemeyer recommended five-grain doses of calomel, and he had himself used it with good effect where the disease set in with constipation.

Dr. James Little thought that, where the head was much threatened in the early stages of the disease, purgatives were sometimes required. Before the ninth day, the patient could often be relieved of his headache by five-grain doses of calomel. Later in the fever, when the abdomen was tympanitic or distended, he had given a teaspoonful of castor oil and turpentine. As to diarrhœa, if the cause of it could be removed, it was better than using astringents. Sulphurous acid, according to his experience, would prevent diarrhœa from setting in, probably arresting decomposition, but, once it had set in, it would not arrest. Of all the remedies that he had heard of for controlling diarrhœa in typhoid fever, the best was one for which he was indebted to Dr. Hudson, and which, he thought, was infinitely superior to any other astringent in respect of safety and general satisfactory character. It consisted of a pill composed of a sixth of a grain of opium, the same proportion of carbolic acid, and three grains of bismuth. He
bad found the application of two or three leeches over the ileo-cecal region to be of benefit, and blistering was not unfrequently followed by mitigation of the irritation of the bowel.

The Treatment of Catarrhal Jaundice by Large Injections of Water at Low Temperatures.

Dr. Edward Krull, of Güstrow, in Mecklenburg, writes to the Berliner Klinische Wochenschrift, of March 19, 1877 (No. 12), a strong recommendation of a novel plan of treatment of catarrhal jaundice. He was led to try this plan by the slowness and inefficiency of most of the customary modes of treatment. He injects, by means of an irrigator, and slowly, between thirty-five and seventy ounces of water, at about 12° Reaumur (or 59° Fahrenheit). On repeating the injections the temperature is raised by degrees to 16° R. (=72.5° F.) The quantity is regulated by the ability of the patients to bear it. He encourages them to retain the fluid as long as possible. This injection, by means of an irrigator, is done daily; but it is rare, he says, to find more than seven injections necessary. In the majority of his cases there was a reappearance of bile in the stools after the second injection. Some of his patients had suffered a long time—one of them nearly one year and a half. This plan almost immediately relieves the gastric sufferings and dyspepsia of the patients, and brings back the appetite. He attributes the improvement and cure to a reflex action on the biliary passages, gall-bladder, and liver, brought about by the increased peristaltic action of the bowels. [The reporter has found the use of frequent large oysters, combined with warm baths, of the greatest utility in catarrhal jaundice; he believes that the use of the irrigators is likely to be a great improvement on this plan.—Rep.] Lond. Med. Record, May 15, 1877.

Effects of Ligature of the Renal Vein.

Buchwald and Litton have described experiments performed with a view to demonstrate the effects of passive congestion and thrombosis of the renal veins. Their results are interesting, especially as they were able to trace the effects of such obstruction for periods varying from two to eight weeks. At first the affected kidney increases in size, the renal epithelium rapidly degenerates; hemorrhages occur beneath the capsule and into the Malpighian tufts, and thrombi form in the renal veins. The capillaries outside the glomeruli are very dilated, those of the interior are, on the contrary, much narrowed. The swelling, edema, hemorrhages, and fatty degeneration, increase hourly, but no inflammatory changes ensue. About the sixth day after ligature, the kidney is noticed to be smaller than its fellow, and its diminution in size continues to proceed rather rapidly, and on the eighteenth day the difference in size is very evident, the tubules in the cortical portion of the affected organ being filled with degenerated epithelium. There is no trace of any interstitial nephritis, and an interesting feature is to be found in the glomeruli remaining quite intact, whilst the surrounding tubules have disappeared—a fact explained by the authors on the hypothesis that other channels than the radicles of the renal vein exist for the outflow of blood by the communication between the efferent venules and the capsule veins of the kidney. Indeed, in animals that long survive the operation, a considerable venous network is found between the capsule of the kidney and the vena cava, or the suprarenal or phrenic veins. The experiments were undertaken with a view to clear up the pathological sequence in two cases of fatty degeneration of the heart, in which, during life, the renal symptoms were those of congestion, but after death the kidneys were found to be in an advanced stage of cirrhosis. The results of the
experiments, as bearing on these cases, showed that probably the interstitial change in the kidneys was the primary lesion, then fatty degeneration of the heart, and, lastly, passive venous congestion of the kidneys.—Lancet, April 14, 1877.

Traumatic Albuminuria.

Under this heading M. Terillon records in the March number of the Revue Mensuelle the following interesting case: The patient, twenty-nine years of age, falling from a third floor when intoxicated, sustained a compound fracture of the left radius and ulna just above the wrist, with marked backward displacement of the lower fragment of the radius. He was admitted on the 3d of June into Saint Antoine Hospital, and in the night tore off the bandages and dressing in an attack of alcoholic delirium. Diffuse cellulitis followed, with much deep-seated suppuration. On July 5th, the bones, the radius particularly, were found to be demineralized, and inflammatory oedema involved the upper arm as high as the shoulder. In spite of energetic administration of tonics, and lessening of the quantity of discharge, the patient remained very prostrated; and on the 10th of July there was noticed to be puffiness of the face and slight oedema of the ankles. The urine was examined, and found to contain a considerable quantity of albumen. On the 11th there was general anasarca, the albuminuria was excessive, and the patient in a very weak condition. M. Terillon felt that the only chance of saving the life of the patient was by resorting to amputation, and this was performed next day in the lower third of the arm through the inflamed and oedematous tissues. Examination of the forearm showed entire necrosis of the radius and ulna, which were bathed in pus. The oedema and albuminuria rapidly subsided, and the general condition as rapidly improved. The progress of the case was, however, retarded by a recurrence of the renal symptoms on the 23d of July, coincidentally with increased discharge from the stump. On the 24th and 25th there was suppression of urine, and the patient had an attack of uremia, becoming profoundly comatose. He rallied from this attack, and on the 26th the urine, although scanty, was free from albumen. The stump assumed a more healthy appearance, and on the 2d of August he was able to get up. On the 15th of August there was again a small quantity of albumen to be found in the urine, and a small abscess of the external ear, which had been forming a few days, was opened. From that date convalescence was uninterrupted, and he left the hospital completely cured on the 8th of September. He was seen several times between that date and the 25th of December, and was always found in good health, and his urine perfectly free from albumen.

M. Terillon, in commenting on the case, states it to be his intention to publish, at some future date, some observations upon albuminuria sequential to surgical lesions. He justifies the amputation in the present case by the extensive disorganization of the limb removed, the apparently recent date of the renal lesion, and the rapid decline in the strength of the patient from the exhausting suppuration. He acknowledges the gravity of performing operations when there is albumen present in the urine, but in viewing the sequence of events, and taking into consideration the previously healthy condition of the patient, he concluded that the nephritis was dependent upon the local suppuration and necrosis. The rapidity with which the anasarca and the albuminuria disappeared after the removal of the limb favored this view, but the grave and sudden recurrence of the albuminuria, with prolonged uremic coma, is inexplicable. M. Vemeuil, who is one of the editors of the journal in which this paper appears, and who, as is well known, is one of the most ardent teachers of the inter-relations of traumatism and diathesis, append a note at the foot of the article in which he points out that, besides cases of albuminuria antecedent to injuries (by far the most serious cases
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for surgical treatment), there are cases of inflammatory surgical affections, as cellulitis, erysipelas, anthrax, osteitis, acute periostitis, etc., in which albuminuria may be primarily started in subjects who, before the onset of the local disease, presented no symptoms of renal lesion. The distinction is a well-recognized one, but cannot be too prominently insisted upon.—Lancet, May 5, 1877.

Anasarca treated by Drainage Tubes.

Dr. Southey, at a late meeting of the Clinical Society of London (Lancet, May 5, 1877), read notes of a case of parenchymatous nephritis, in which the anasarca was combated by drainage tubes. The capillary drainage tubes and tiny silver cannulas employed by him in the treatment of the general dropsy were exhibited by him. The cannulas were scarcely larger than the ordinary subcutaneous injecting-needles, and were introduced by a fine trocar. They terminated with a little bulbous extremity, over which the capillary India-rubber tube was drawn after its introduction into dropsical limbs. A thin thread and small piece of adhesive plaster sufficed to maintain the cannula in the skin, and the connected drainage-tube was conducted below the patient and into a pan beneath the bed. The large amount of serous fluid which might thus be withdrawn in dropsical subjects from a single prick in each leg was quite surprising. The fluid continued to drop away for as many hours as the tube was retained in situ, and without any discomfort to the patient. No escape of fluid took place beside the cannula. The whole was conducted outside the bed, and several pints usually thus drained away from highly dropsical subjects each twenty-four hours. The recommendations were manifold of this exceedingly simple and cleanly method of relieving anasarca when this was extreme. 1. Instead of several needle-pricks, all of which were painful and likely to form troublesome sores and centres for erysipelas to depart from, one, or at most two—only one for each limb—were needed. 2. The skin round about the puncture was not macerated by the oozing serum, nor irritated by it. 3. The patient was kept dry and warm and clean in bed. 4. The relief obtained was more speedy as well as more thorough. 5. Should the escape of fluid prove too rapid and become attended by circulatory disturbance in the dropsical limbs, or by uremic symptoms, the quantity drawn off could be easily regulated, controlled, or temporarily arrested, by a tiny clamp placed upon the tube. 6. The serous fluid, which in cases of renal anasarca contained very large amounts of urea, could be tested for this, and the quantity thus escaping be exactly ascertained. Thus, in the particular case brought forward by Dr. Southey, the average amount of urea which was thus excreted amounted to 4.7 grammes, or 72.56 grains for twenty-four hours. In point of fact, Dr. Southey had drawn off as much as fourteen pints of serous dropsical fluid in twenty hours from a patient by two such tubes; and, in answer to questions put to him, he was able to state that he had seen no inconvenience arise from the maintenance of the cannula in the skin in the same situation for forty-eight hours; the prick-hole closed at once and without ulcerating when it was withdrawn; and it was his belief that this mode of treating extreme and intractable anasarca, from whatever cause arising, would come to be very widely adopted. The whole apparatus was as simple as it was easy of application, and entirely efficacious. In reply to Mr. Howe, Dr. Southey said that the calf of the leg was the best place for the puncture; and the cannula, which was provided with a bulbous extremity, remained in place in the cellular tissue. The instrument had been made for him by Mr. Ferguson.
Pityriasis Rubra Universalis.

Dr. Hebra, Jr., describes in the Archiv für Dermatologie und Syphilis, 1876, a case of a man, 38 years old, suffering from the above disease, who was admitted into Hebra’s clinic, in July, 1872. Wheo eight years old he had had variola, and from that time the skin was never quite normal; becoming unusually red under the influence of warmth, and blue when exposed to cold. He was apprenticed at fifteen, and the colour of his skin was then a subject of remark amongst his fellow workmen. The abnormal appearance of the skin gradually increased, and two years before admission to the hospital he became unable to work, tension of the skin preventing free movement of the extremities. Some months previously, he had observed scales on the legs, and in eight months they existed over the whole surface. Six months later, the hair of the head, beard, and finally of the pubes, fell out. On his admission, he presented all the appearances described in Hebra’s work, with the addition, that in some parts the skin was fissured. In was three and a half years under treatment, and died in the hospital. During this time, the only change that took place in the aspect of the skin was that, instead of the original bright red colour, the tint became a dark brown-red, and on pressure with the finger, the colour did not completely disappear.

In March, 1874, he had an attack of pneumonia. Whilst the attack lasted, the redness and scaling diminished; but they reappeared as he recovered. He had another attack of pneumonia in July, 1875, which left tubercular infiltration behind it, and he died of tubercular disease of the lungs and intestine in July, 1875. The treatment employed had no influence on the course of the disease. The different external remedies tried were, applications of cod-liver oil, water-baths during the whole day (the patient returning to his bed at night), an India-rubber suit of clothing, and precipitate and diachylon ointments. These were continued separately, over periods exceeding one hundred days each. Benzoin was tried, but, after three weeks, had to be discontinued, on account of the discomfort it produced.

He had two courses of arsenic. Pills were given containing one-tenth of a grain of arsenious acid each; at first three daily, then increased weekly until he took twelve daily, and again diminished to three daily. Each course was continued until he had taken 2000 pills (200 grains of arsenic), there being an interval of two years between the courses. He thus took in all 400 grains of arsenic. No constitutional disturbance was produced by the metal.

The microscopic examination of the skin after death showed absence of the papillary layer and sweat-glands, few traces of the sebaceous glands, and a considerable quantity of pigment-granules.

A second case is that of a man, aged 53. A year before admission he was affected with redness and scaliness of the skin, attended with itching, the disease rapidly extending over the whole surface. When admitted, he was suffering from tuberculosis, and he died of this disease within the first month of treatment. All the organs of the skin were normal. There was a large amount of cell-infiltration, similar to that found in other skin affections.

In a third case the outbreak of the disease was observed. A woman, 64 years old, was admitted on account of impetiginous eczema of the scalp. One day she complained of feeling ill and sleepless, the temperature being found abnormally high. After two days the whole skin became a deep red, the fever and loss of appetite continuing. Within a week the diagnosis was made. The slight swelling that accompanied the outbreak of the disease diminished, but the desquama-
tion of epidermic scales which adhered to the surface continued. She remained two months under observation, and then left the hospital.—London Med. Record, April 15, 1877.

SURGERY.

Lymphadenoma.

At the meeting of the Société de Chirurgie, on Feb. 21st, M. Trélat read a paper dealing with the surgical aspect of lymphadenoma, or, more properly speaking, of lymphosarcoma. He stated that in 1872 he had under his care, at La Pitié Hospital, a man, thirty-six years of age, suffering from a tumour of slow growth on the right side of the neck, with enlargement of the neighbouring glands, and a small tumour in the thigh. The removal of the tumour in the neck was followed by recurrence, and the patient sank after the second operation, and there was found disseminated in the vertebrae, sternum, spleen, and liver, a large number of growths of lymphomatous nature. The lesson derived from this case by M. Trélat was to decline to operate in all cases of lymphadenoema in which any suspicion of visceral implication might be entertained. However, last year another patient came to him, apparently in robust health, fifty-five years of age, presenting a tumour of the left testicle. He stated that when twelve years old he received a blow on the scrotum, but thought nothing of it until he was declared unfit for military service on account of some malformation of the left testicle. He married, and became the father of fourteen children, and it was not until he was forty-eight years of age that he first noticed a slight swelling of the left testicle, a swelling which very slowly increased, so that he did not come to the hospital until seven years after. The tumour was smooth, firm, slightly painful, and compressed the testis and epididymis, and M. Trélat came to the conclusion that it was a sarcoma of slow growth. He accordingly performed castration; a small tumour upon one of the eyebrows being considered to be probably of lipomatous nature, and nothing to do with the testicular growth. However, the disease recurred in the genitalia; the right testis became the seat of nodular and painful enlargement, and a fresh growth appeared on the eyebrow by the side of the former, and the patient somewhat rapidly emaciated and died. Tumours of lymphadenomatous type (similar to the primary growth in the left testis) were found in the right frontal region, sternum, and spine, and in the mesentery, liver, and spleen. M. Trélat asked whether it was possible to diagnose such cases, and gave it as his opinion that previous to resorting to ablation small portions of such growths should be excised for microscopical examination, and if they were of lymphomatous nature their ablation should not be attempted. It was pointed out in the discussion, however—and here we think most surgeons and pathologists will agree—that there are forms of lymphadenoema which are malignant, and others that are truly benign, but it was not said whether there were any definite histological criteria for discriminating between the two varieties. M. Trélat also added that the malignant forms were peculiar to adults, and that they did not always arise primarily in lymphatic glands.—Lancet, April 14, 1877.

Epithelial Cancer of the Lips and Face.

Professor Busch, of Bonn, in a communication to the Congress of German Surgeons, began by stating the theory of Thiersch, according to which this form of cancer originates in a disturbance of the equilibrium between the epidermis and