

Sulphate of quinine	gr. xij
Acetate of lead	gr. vj
Tannin	gr. iv
Opium	gr. ij

Mix and divide in 12 powders.

Take one at intervals of two, three or four hours according to the frequency of discharges from the bowels. Apply red-oak bark poultice to abdomen after rubbing the surface with camphorated spirits of turpentine.

April 27th.—The irritation of bowels ceased after second astringent powder, when they were suspended. The poultice was discontinued, using a flannel roller with camphorated spirits of turpentine upon the abdomen. The tympanitis has disappeared; tongue not slick and red as before, pulse 125 to the minute, and passed the night quietly. Still some stiffness of neck. The terebinthinate mixture was alternated with one grain of quinine every two hours, taking milk punch after each.

April 28th.—Passed a restless night, and shows nervous agitation to-day. Bowels only moved twice in thirty-six hours, the tongue moist with slight coating, pulse 125 to the minute. Gave 5 grains of chloral hydrate, to be repeated hourly for three times, and if not quiet within two hours afterwards, to give $\frac{1}{4}$ grain of morphine. Continue terebinthinate mixture and quinine with milk punch.

Notwithstanding that the neck is still stiff there is no deafness nor impairment of vision and the intellectual faculties are not affected.

April 29th and 30th were passed in a state of great nervous agitation, notwithstanding the free use of chloral and morphine, so that other agents seemed to be required for calming him.

May 1st.—Observing an ash-colored fecal evacuation I inferred that a stimulus to the biliary function was called for, and gave 3 grains of saccharated calomel, with instructions to repeat it every four hours, until the passages should be colored with bile. Within two hours an evacuation indicated a change in the color, and with the correction of the hepatic secretion it was expected that the nervous trouble would be relieved. The pulse was 125, temperature 100° Fahrenheit, tongue clean, no tympanitis, slight stiffness of neck, the pupils were normal and responded to varying degrees of light.

May 26th.—The closing record of this case notes that there has been no indication, recently, of any febrile excitement; but at times considerable nervous irritability and fretfulness, without any mental disturbance. He is still feeble, but without any consequences of the disease in contraction of muscles or defect of sight or hearing. His nourishment consists of milk punch, soft boiled eggs, etc. This result manifests the impairment of all the vital forces from this disease, even when the most energetic measures are resorted to

at the outset to correct the disturbance of the nerve centres and the derangement of the biliary secretion.

It is evident that the symptoms, indicative of cerebro-spinal meningitis trouble, were controlled by the use of the calomel and quinine, followed by the salicylate of soda and fluid extract of jaborandi; and none of the usual results of the most aggravated cases, such as deafness or loss of sight connected with cerebral effusion, ensued in this case after the expiration of thirty-nine days' sickness, not including convalescence.

The details of this typical case, with many serious developments combatted by special measures, are presented in preference to giving the treatment of other patients, with a view to demonstrate clearly my practice in cerebro-spinal meningitis.

NOTE.—In the person of a vigorous man, about 30 years of age, on June 24, there occurred excruciating pains of the head, with contraction of the muscles at the back of the neck, and vital depression. At 9:30 P.M. he took 10 grains of antipyrin and repeated the same within an hour. He was directed to await the visit of my colleague, Dr. P. E. Murray, at midnight, to determine upon the propriety of a third dose. Upon his arrival the cervical muscles were found relaxed and the pain in the head much relieved, so that he withheld the antipyrin for the night. On visiting the patient next morning, I gave him the remaining 10 grains with complete relief of all the symptoms.

On the afternoon of June 25 he took 5 grains of calomel with 10 grains of bicarb. soda, three times, with intervals of two hours, followed next morning by citrate of magnesia, which had a purgative effect.

June 26 and 27, sulph. quinia was taken in doses of 10 grains and the patient is convalescent.

Was this a case of cerebro-spinal meningitis, jugulated by the antipyrin?

A CASE OF CHRONIC INTERNAL HYDROCEPHALUS.

Read before the Medical Society of the District of Columbia, February 22, 1888.

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The history of the patient, obtained from his mother is as follows: He was at birth smaller than her other children, and no disproportion of the head was noticed at that time. The delivery was accomplished by a midwife, who used strong traction without the assistance of the natural powers, and it is to this violence that the mother attributes the misfortune of her child.

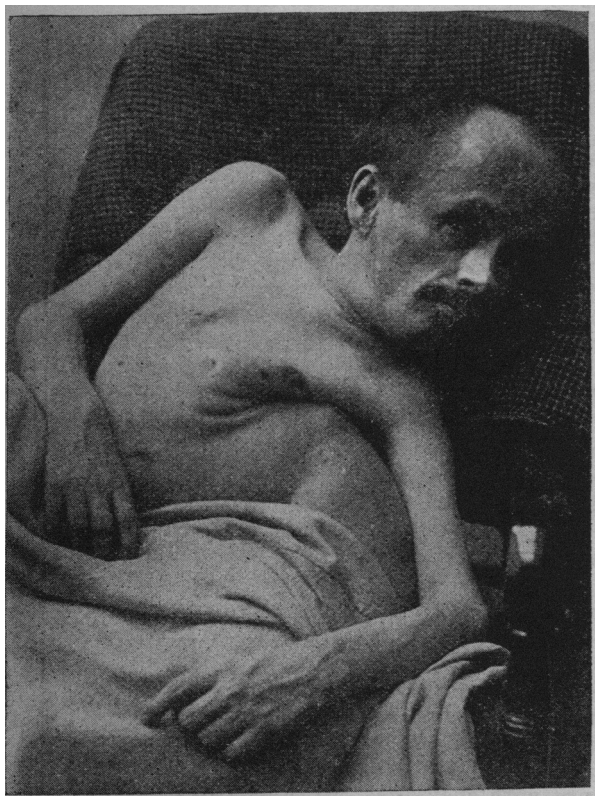
Enlargement of the head was not noticed until the child was three or four months old, when the mother observed a prominence at the posterior

fontanelles. The head rapidly increased in size until at the age of two years it was as large as at his death. The fontanelles remained open until he was seven years of age.

No attempt to walk was made until he was about 9 years old, when he made some efforts at locomotion, but was soon confined to his chair; later in life he used a rolling chair.

In early childhood his spine was straight, but it soon became extremely curved.

His general health was good, due to the extreme care of his mother, but he suffered much from headache, chronic constipation, and some form of urinary disease causing retention of urine at times. He never had convulsions, and though his movements were imperfect he had no distinct paralysis, and no disturbance of the special senses was observed until toward the end of his life.



C. F. Hydrocephalus.

The mental power was, of course, limited, but he had remarkably retentive memory, and though he could not read, having never been taught, he could remember and fairly understand what was read to him.

He was fond of singing and whistling, and could remember both, words and tunes after hearing them a few times.

His moral sense was well developed, and though he was mischievous he was harmless, and he of-

ten expressed his gratitude that he was a cripple rather than a drunkard.

A sense of humor was not altogether absent; he had some appreciation of a joke, and one of his greatest amusements was to look at comic pictures.

His articulation was imperfect, but he could be easily understood by those acquainted with him.

On admission to the hospital he seemed to be much prostrated, physically and mentally; he talked but little, and he was unable to sit erect without assistance.

His age at the time of his admission was 38 years; height, 4 feet 5 inches. The head was greatly enlarged, globular, and slightly flattened at the top, forehead prominent, hair scanty and some baldness of vertex and frontal regions. The scalp was thin and the vessels prominent and tortuous. The eyebrows were elevated and irides partly covered by the under lids. The teeth were irregular and carious. He had a small moustache and "goatee" but the beard was scanty.

The trunk was so much deformed by anterior and lateral spinal curvature that the left iliac crest occupied the corresponding axilla. The body, limbs and genital organs were ill-developed.

Death occurred from exhaustion and with symptoms of an exacerbation of the disease.

Autopsy. C. F., age 38 years; nativity, D. C.; mental disease, imbecility.

Autopsy twenty-four hours after death: Rigor mortis slight; decomposition commencing.

Cranium. The head measured twenty-seven inches in circumference; antero-posterior diameter $9\frac{3}{8}$ inches; transverse diameter 7 inches. After removing the scalp the skull was $25\frac{1}{2}$ inches in circumference; occipito-frontal diameter $9\frac{3}{8}$ inches; biparietal diameter $6\frac{3}{8}$ inches. The skull was asymmetrical, the left frontal, and the right occipito-parietal regions being more prominent, making a difference of half an inch between the two oblique diameters.

The skull was thinner than usual and somewhat dense, but the diploe was normal in proportion. The sutures including the frontal, were all well marked in the external table but the lambdoid and sagittal were obliterated in the inner table. No ossa triquetra were found. The depressions made by the convolutions and the meningeal arteries were unusually distinct. The cerebral fossæ seemed more shallow than usual, the orbital plates were somewhat flattened, and the pituitary fossa large and deep.

A paraffine cast was taken of the interior of the skull; it displaces about $98\frac{1}{2}$ ounces of water, showing the cranial capacity to have been about 178 cubic inches.

Brain. The dura mater was normal in appearance and not adherent to the bone; the pia mater was normal; the cerebral vessels moderately filled, and the arteries at the base were healthy.

While removing the brain the ventricular cavity was accidentally opened and 57 ounces of clear fluid escaped. The brain collapsed and lay in folds at the base of the skull.

The brain weighed $43\frac{1}{2}$ ounces; the left hemisphere, $20\frac{1}{4}$ ounces; the right, 18 ounces; the cerebellum, pons and medulla $5\frac{1}{4}$ ounces.

The convolutions were much flattened, the fissures shallow, and some of the latter were obliterated. The central fissure and convolutions were distinct on both sides and the fissures and convolutions of the occipital lobes were but slightly altered.

The cerebral substance was in some places not over $\frac{3}{8}$ of an inch in thickness. The thinnest portions were in the left frontal lobe and the right frontal and parietal lobes; the right side was considerably thinner than the left.

On opening the ventricles the lateral and third were found to be greatly dilated, having a capacity of at least 54 fluid ounces. The aqueduct of Sylvius and the fourth ventricle were not dilated. The gray commissure had been destroyed, the septum lucidum extremely attenuated, and the foramen of Monroe greatly enlarged. The basal ganglia were flattened and distorted and a small brown softening was found in each lenticular nucleus.

The ependyma was thick, tough and fibrous, and in some places had a reticulated appearance.

The brain tissue was pale and somewhat softened by post-mortem change.

The cerebellum, pons and medulla presented no unusual appearances except that the lining of the fourth ventricle was in a condition similar to that of the other cavities. The thorax was much deformed and the lungs corresponded in shape to that of the thoracic cavity. A few scattered calcareous nodules were found in the right lung.

The heart was small, but otherwise normal.

Spleen weighed $1\frac{1}{4}$ ounce, pulp normal.

Liver normal; gall bladder contained nine rough calculi.

The left kidney weighed 3 ounces; the right, $2\frac{1}{2}$ ounces; structure apparently normal.

No mechanical or other cause was discovered for the effusion, but the condition of the ependyma indicated that the disease may have originated in a chronic inflammation of this membrane, and that the process was arrested in time to allow of closure of the sutures without the formation of supernumerary bones.

SEA-WATER IN LONDON.—The London Sea-water Supply Bill has passed both houses of Parliament. The sea-water will be brought to London from Sussex County. It is thought that the works will be completed by 1890. As London grows the supply of fresh water becomes scarcer, and it is hoped that the sea-water will be used for bathing and street watering.

RADICAL CURE OF PTERYGIUM.

Read to the Mitchell District Medical Society, at French Lick Springs, Indiana, June 22, 1888.

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Pterygium has been variously described as being cicatricial in its nature, as due to small ulcerations in the limbus conjunctivalis, and as a genuine hypertrophy of the conjunctiva. A little attention to the anatomical characters of pterygium will show that the portion in contact with the fascia is made up almost entirely of abnormal connective tissue fibre.

It will be observed that the pterygium is not so broad upon its under surface as it is externally. There is a well-marked fold running longitudinally along its margins from apex to base. This marks the site of cicatricial tissue, which causes contraction to take place at the bottom of the growth, which seems to be most dense at the limbus of the conjunctiva, whilst that part which seems to overlap the cornea is formed by a folding in of that portion of the anterior elastic layer of the cornea which is involved in the apex of the growth. The capillary blood-vessels at the limbus of the conjunctiva are observed to be much altered. They are irregular in form and size, presenting the appearance of the new capillaries in callous tissue. The amount of connective tissue fibre and the number of wandering cells in the substance of the morbid growth serve to swell its bulk. If the pterygium be excised, the tendency to cicatricial formation is commensurate with the number of vessels divided. If no infecting material gain access to the wound, a large mass of irregular connective tissue fibre results from the changes which take place in the leucocytes and the wandering cells found in the loose network of cellular tissue always abundant in the ocular conjunctiva.

Arlt and Hasner have given much attention to this subject. They are persuaded that ulceration of the cornea at its periphery has little or nothing to do with the development of a pterygium. The well-known pinguecula which results from ulceration of the limbus conjunctivalis is always a purely local affection. It may be frequently observed in persons who have had purulent conjunctivitis with chemosis. In these cases, the loss of surface epithelium allows the overlapping conjunctiva to become adherent to the anterior elastic layer of the cornea; and when the infiltration disappears as the swelling goes down, the little loops of the conjunctiva which were folded up are attached to the surface of the cornea, and present the characteristics of what is commonly called pinguecula. This never extends out over the surface of the globe. It does not correspond to the direction of one of the recti muscles. On the other hand, pterygium always overlies one of the