

seminated sclerosis, and he considers that the typhoid fever is the cause of them.

In support of this view, he quotes a considerable number of cases recorded by competent observers. Of these, 10 cases are given in which the nervous symptoms appear after typhoid fever; 4 after variola; 2 after erysipelas; 3 after pneumonia. He also gives cases occurring after measles, scarlatina, whooping-cough, intermittent fever, diphtheria, cholera, syphilis. In all these cases the prominent symptoms were tremor, paresis of limbs, and, less often, troubles of speech and nystagmus.

In only three cases (Ebstein, Jolly, Joffroy) was the diagnosis confirmed by autopsy.

In five cases the symptoms abated, or completely disappeared.

The author ends with some remarks on the pathology of disseminated sclerosis. He starts by postulating the vascular nature of the disease, and he remarks that arteritis bears a close relation to infectious diseases, and also tends to be disseminated over the body in patches. Popoff has described an accumulation of lymph-cells in the perivascular lymphatics in typhoid fever. Ribbert believes that an irritant substance (microbe) can be carried by the circulation, and being arrested by the vascular wall, determines a perivascular inflammation, which is the cause of a patch of sclerosis.

M. Marie arrives at the conclusion, that typhoid fever and other infectious diseases have a series of secondary and tertiary accidents, comparable to those of syphilis. As one of these he regards disseminated sclerosis. He suggests that what are now called "*late complications*" of the diseases, should be called more properly "*late manifestations*."

M. Marie's paper is a very interesting one, but we must admit that, however much we may be inclined to agree with his conclusions, yet we cannot regard his premisses as particularly strong. It is much to be regretted that more autopsies are not recorded. We should decidedly hesitate to diagnose disseminated sclerosis from the meagre symptoms in some of the quoted cases.

However we cannot but hail with interest any observations on the aetiology of so obscure a disease as disseminated sclerosis, and M. Marie's remarks on the pathology of the disease are particularly instructive.

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Case of Recurrent Dropsy of the left middle Ear, complicated after eight years duration by acute attack of Monocular Optic Neuritis on the same side, followed by General Tabetic

Symptoms. By CHARLES H. BURNETT, M.D., and CHARLES A. OLIVER, M.D. (*American Journal of Medical Sciences*, Jan. 1884).—At 8 years of age the patient had a polypus removed from the right ear; when seen at the age of 55 he was deaf with this ear, and it appeared that the canal had become closed by the growth and organisation of granulation tissue formed after the removal of the polypi. He applied, however, on account of recent deafness in the other (left) ear. The membrane was opaque and the malleus retracted. But from statements of the patient it was surmised that there was fluid in the tympanic cavity: paracentesis evacuated a little tea-coloured fluid, and gave much relief to the symptoms.

Deafness, however, recurred, and the operation was repeated with relief to this symptom as many as 38 times in the course of the next two years. At last the fluid did not return, but ordinary hypertrophic catarrh of the middle ear set in. He had by this time developed dizziness, and staggered on turning round. This symptom, however, the authors regard as "tabetic in origin" rather than as referable to the ear-disease.

About a year after the aural treatment was begun, he complained of dimness of vision in the left eye. In this (the left eye) there was well-marked optic neuritis with swelling of the disc. Vision for light only. In the right eye the optic disc was dirty grey in colour, but there was no evidence in the authors' opinion of past neuritis: there was uniform contraction of the colour fields. The optic neuritis of the left eye gradually disappeared; the disc finally assuming the dirty-grey colour seen in the right disc, and correspondingly the vision for form and colour reappeared, to disappear again as atrophy set in. In brief, simple atrophy was observed in the right optic nerve, optic neuritis with consecutive atrophy in the left.

The remaining symptoms observed were, loss of smell in the left nostril; unsteadiness when walking, exaggeration of patellar tendon-reflexes, especially on the left side; which subsequently became diminished, though the left remained always in excess of the right. The pupils acted normally to light. There was slight paresis in the right facial district, probably to be connected with the old ear-disease on that side.

The condition of the ears the authors suppose to be purely local. The uniocular neuritis and the loss of smell they ascribe either to a cerebral tumour of uncertain position or preferably to a chronic pachymeningitis at the base of the left side of the brain; the remaining symptoms to sclerosis of the posterior columns. (But

seeing that the tendon-reflexes were exaggerated, the pupils acted normally to light, and that there were no pains, the diagnosis of posterior sclerosis seems rather uncertain.)

On the neglect of Ear-symptoms in the Diagnosis of Diseases of the Nervous System. By G. L. WALTON, M.D. (*Journal of Nervous and Mental Disease*, October 1883).—The author draws attention to the fact, that while the relations of the eye and its functions to nervous disease have been minutely studied, and the condition of this sensory organ is reported in all careful accounts of cerebral disease, yet the ear and the sense of hearing have been for the most part neglected.

Hysterical deafness, with loss of hearing power for high tones, analogous to hysterical blindness with contraction of the visual field and colour-blindness, is, he thinks, an example that ophthalmic facts, important from a neurological point of view, may be paralleled by aural facts. But, as a matter of fact, in the reports of nervous cases the hearing power is usually either not inquired into at all, or else any existing deafness is at once set down to the nervous disease without investigation of the peripheral organs of hearing. Thus, the seeming rarity of deafness in disease of the pons and cerebellum is probably due to the fact that the hearing is not systematically examined in such cases. Actual examination is necessary, for the patient may be quite ignorant that he is deaf, and deafness of one ear may evade the physician's notice if not looked for. But even where deafness is reported, there is often either no examination of the ears made, or a most superficial one. Thus, cases of locomotor ataxy with deafness are frequently related; the inference being that the deafness is due to the nervous disease; whereas, according to the author's experience, it is much more often peripheral than central. The same with the so-called Ménière's disease, which is more often than not due to disease of the middle ear.

Examination of the Spinal Cord in a Case of Polio-Myelitis of the Adult of two months standing. By JAMES J. PUTMAN, M.D. (*Journal of Nervous and Mental Disease*, January 1883).—A single woman, æt. 22, had caught cold while menstruating, three weeks before admission; the flow was checked, and pain in the head, neck, back, and limbs set in, with vomiting. In three days there appeared paralysis of the limbs, with numbness, and inability to hold her urine.

When first examined, the temperature was 99.8° ; there was tenderness along the spine, pain on movement, atrophy of the muscles of the limbs, specially marked in the right arm and intrinsic muscles of the right hand; some contracture of the right arm and hand. There was some improvement for a month; then a rise of temperature, up to 102° . After another month there came a similar rise of temperature, accompanied by vomiting and diarrhoea, which proved fatal.

The post-mortem appearances (naked eye and microscopic) are thus summarised by the author. Extensive ulcerations in the large intestine; subpleural hæmorrhages. Throughout the whole length of the spinal cord anterior and posterior poliomyelitis [each anterior and posterior cornu was threaded in its whole length by a column of inflamed tissue]; but the right anterior cornu had suffered most severely; here, in many sections, there were no healthy ganglion cells to be seen; also atrophy of the anterior nerve-roots and to a less extent of the posterior; subacute inflammation of the antero-lateral white columns; a moderate amount of lepto-meningitis; thickening of the vessels everywhere even in the posterior columns, and diffuse though moderate increase of the connective tissue.

The author suggests that diffuse myelitis would be the fittest name to apply to the case.

The Pathological Anatomy of the Cerebro-Spinal Axis of a Case of Chronic Myelitis of nineteen years standing. By Dr. H. D. SCHMIDT (*Journal of Nervous and Mental Disease*, July 1883).—The case originated in a gunshot-wound of the neck. At the time of the post-mortem there was no trace left of fracture of the vertebræ, or of direct injury to the cord in this situation. Complete paralysis of all four extremities succeeded the injury immediately. The paralysis of the legs disappeared, leaving the arms paralysed, and at first hyperæsthetic, subsequently anæsthetic. The arms became contracted in a year. Sixteen years after the injury the patient could walk, but there was contracture of the left foot, and commencing pains and hyperæsthesia of the lower limbs. After 18 years, muscular atrophy had begun in the hands and arms. He finally became unable to walk, lost control over his evacuations, and died in a state of coma and complete paralysis.

The macroscopic appearance of the brain was normal. The cord in the cervical region was flattened and softened, there was here a tubular cavity apparently caused by the softening.

Further, a yellowish-grey discoloration was observed in the posterior columns, in the left postero-lateral column and in the periphery of the white substance, and in spots scattered through the rest of the white substance. It diminished from above downwards, and does not appear to have been strictly systematised; it was generally diffused through the pons and medulla. Microscopically, the following points were made out. (*a*) There was degeneration of almost all the vessels of the cord—the arteries of the pia mater (which were least affected) showed thickening of the adventitia and indistinctness of the muscular coat, while the walls of the smaller vessels within the cord and medulla were pale, granular and indistinct. (*β*) Round the vessels, both upon the large and small septa of the cord, was a fibrinous exudate, pale and granular, but staining deeply with carmine. (*γ*) There was atrophy of nerve fibres very variable in degree, apparently caused by pressure from the exuded material. (*δ*) Numerous rounded bodies were observed, both in the grey and white matter, specially in the medulla and pons. These could not be proved chemically to consist either of fat or of amyloid substance. The author considers them to have been ganglion cells of the grey matter and nerve-nuclei of the white substance in various degrees of degeneration.

Two Cases of compression of the Spinal Cord by Sarcomatous growths from the Soft Membranes. By G. LONG FOX, M.D., F.R.C.P. (*Bristol Medico-Chirurgical Journal*, July, 1883).—*Case 1.*—A woman æt. 35, strained herself while lifting a window, and a month after began to feel pain in the right arm and weakness in the right hand. Some months later, after getting wet, loss of power in both legs and arms was noticed. When seen nine or ten months after the original strain, there was almost complete motor paralysis of both arms, sensation being also impaired, though not absent; and complete motor paralysis, with dulness of sensation, in the legs. There had been incontinence of urine and constipation. Pupils regular. Tendon-reactions exaggerated. No distinct muscular atrophy. Some tenderness over 6th cervical vertebra (a seton had been worn there). Death in five months more, from bronchitis and paralysis of the intercostals.

Post-mortem, a hard rather vascular tumour (having the microscopic characters of a spindle-celled sarcoma), measuring $1\frac{1}{2} \times \frac{3}{4}$ in. was found growing from the arachnoid on the anterior surface of

the cord in the cervical region. It had there destroyed by pressure all the cord except the posterior columns. The cord was almost deliquescent at the level of the tumour, and softened down to the lumbar region.

Case 2.—Shooting-pains in the arms, especially at night, for three months, the right arm being worst: then loss of power of extension, first in the right fingers, and next in the left. For five weeks, numbness and pricking in the toes, first of the right foot, and then of the left; gradually this extended upwards to the waist. Priapism and difficulty in micturition. When examined, there was anæsthesia up to the third rib, and paralysis of the lower limbs. Plantar reflexes normal. The fingers were at first the only parts of the upper limbs that were paralysed, but gradually nearly the whole arms became involved. Thoracic respiratory movements began to fail before death.

Post-mortem.—Well-defined tumour (spindle-celled sarcoma), measuring $1\frac{1}{2}$ inch \times $\frac{3}{4}$ inch, on the left posterior aspect of cord in cervical region. Much softening of the cord in its neighbourhood. Along the whole length of the cord below was a belt of yellowish-grey substance $\frac{1}{4}$ inch thick, enveloping the cord on all sides equally.

Seguin on the American method of giving Potassium Iodide in very large doses. (*Arch. of Medicine*, 1884, p. 114.)—The author alludes more particularly to the later nervous lesions of syphilis. In many cases he admits that ordinary doses (viz. up to 8 grammes, or 120 grains daily) are sufficient. But it often happens that 10 or 15 grammes a day have to be administered, and this dose increased week by week, before results can be obtained. For instance, in syphilitic headache Seguin prescribes two doses of 4 grammes (60 grains) each on the first day, and increases this quantity by one dose every day until 32 grammes (1 ounce) are taken in the twenty-four hours. Very large quantities must be taken in syphilitic coma, especially when convulsions or choked-disc are present. It is obvious that in specific hemiplegia, and the like, the iodide cannot be expected to remove the symptoms depending upon actual destruction of nervous tissue. The salt should always be given on an empty stomach, largely diluted with some alkaline water.

On the efficacy of Iodide of Potassium in non-Syphilitic Organic Diseases of the Nervous System. By Dr. E. C. SEGUIN.—The author gives three classes of cases.

I. In which symptoms were temporarily relieved, and in which, post-mortem, the lesion was proved to be non-syphilitic.

Case 1.—Right-sided hemiparesis with inco-ordination, palsy of left external rectus; headache, vomiting, optic neuritis. Improvement under iodide of potassium (10 to 40 drops of a saturated solution three times daily for two months). Death about five years afterwards: *sarcoma of left crus cerebri*.

Case 2.—Headache, vomiting, staggering gait; exophthalmos, double optic neuritis; a soft pulsating tumour in region of lambdoid suture. Iodide from 90 to 150 grains per diem; some relief to symptoms. Death within a few months: *fibro-sarcoma of cerebellum, with dropsy of the ventricles*.

Case 3.—Fall on back of head; subsequently attacks of vomiting with headache; paralysis, especially of the left side, optic atrophy. Four years later, right hemiparesis, absence of tendon-reflex at knees, epileptiform attacks with occipital pain. Iodide (10 to 40 drops of a saturated solution), taken three times daily, cut short the fits. Death next year. *Sarcoma of right hemisphere of cerebellum; meningitis of convexity of cerebrum*.

II. Cases without post-mortem; symptoms cured or relieved by iodide, no evidence of syphilis.

Case 1.—Numbness of left side, mental affection. Numbness disappeared while taking iodide; patient lapsed into dementia paralytica.

Case 2.—Paralysis of third nerves; paresis and ataxia of limbs. Two attacks were relieved by iodide of potassium, 30 to 120 drops of the saturated solution three times daily. A third attack appears to have resisted all treatment.

Case 3.—Right-sided convulsions affecting the face principally; aphasia. Recovery while taking iodide of potassium, at first combined with the bromide.

III. Cases of double optic neuritis in children, probably due to basal meningitis; apparent good results from large doses of the iodide. Three cases are given; headache, vomiting, and internal squint were observed in addition to the optic neuritis.

The author gives the iodide largely diluted with water, Vichy water, or solution of bicarbonate of soda.

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