TUMOURS, ATTACHED TO DURA MATER, PRESSING ON THE SUPERFICIAL BRAIN-SUBSTANCE; PARALYSIS.

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(Concluded from p. 661.)

CASE 2.—A. M.—, a female, aged fifty-five, admitted into the Hampstead Asylum Sept. 9th, 1873. Has been twice married; previous to her second marriage, twenty-nine years ago, suffered from syphilis. Her husband states that for the first fifteen years of their married life everything went well with them, and they lived happily. After this her whole nature and habits changed: she neglected her home; ceased to assist him at his trade (watchmaking, at which he says she could earn a guinea a day); took to drinking and going with other men, pledging and selling furniture, clothing, and everything she could lay her hands on. During her menstrual periods she suffered from severe frontal headache. Three years before she was sent to the asylum her husband took a cottage in the neighbourhood of London, and placed her in it, thinking that removal from evil associations would effect a change in her ways. In this he was disappointed; she became more addicted to drink and bad company, depraved and reckless in her conduct, stripping herself naked and sitting at the open window in a state of nudity, frequently being so drunk as to be unable to recognise her own house. Her husband then separated himself from her, and gave her a weekly allowance in money sufficient to keep her. Ten weeks previous to her admission the woman in whose house she lodged informed her husband that his wife was dying. On visiting her, he found her partially paralysed, having to a certain extent lost the power of her hands, walking with difficulty, her speech hesitating and her articulation imperfect, the angle of her mouth on the right side drawn down, the right eye open and vacant-looking, and her manner childish. She had lost all knowledge of the value of money; and stated that some one had died and left her a large fortune. Ate her food ravenously, seizing it with her hands and thrusting it by the handful into her mouth. She was taken to the workhouse, where, at the end of a fortnight, she lost her sight, and was then brought to the Hampstead Asylum. On admission, the power of the right side seemed less than the left, and she was blind and deaf—to a certain extent. She could distinguish light from darkness, apparently, with the left eye, always bringing it to bear in the direction that she heard any sound. The left pupil was dilated, and she seemed to have more power of the left than the right eyelid. Her bodily condition was good. Mentally, when spoken to loudly, she would answer correctly; often requested the nurses to inform anyone that came after her that she “never took the money”—having, apparently, the delusion that she had stolen something, and that detectives were on her track. She constantly requested the nurses to go out and purchase drink for her. Her speech was slow and hesitating; was able to walk slowly without assistance, and preferred to find her way about herself, screaming if anyone touched her, and saying that they meant to “lead her against something.”

Continued much as on admission till a week before her death, when she began to change, was dirty in her habits, screamed when moved, said she suffered greatly from pain in her throat, right ear, and legs. Halted between each word in her sentences, and had great difficulty with labials: thus, told her husband that if he “would—take—her—out—she—would—be—quite—well—in—a—fortnight.” Had delusions of mistaken identity, and had no idea of where she was. At 9 o'clock in the evening of the day before her death she was reported as being in a fit. When visited was found to be generally convulsed, but more severely on the left side than on the right side. In one hour had four fits, and was more or less convulsed all night. Had a very severe fit next morning, from which she never rallied, dying comatose at 8.47 A.M.

Autopsy, twenty hours after death.—Temperature 50°; body well nourished; rigor mortis general and strong.—Head:

Measurements — occipito-frontal, 7½ in.; temporal, 6 in.; frontal, 4 in. Calvaria normal; slight opacity of arachnoid. The arachnoid sac contained about half an ounce of sero-sanguineous fluid, and in the meshes of the pia mater, over the left parietal lobe, there was about half a tablespoonful of fluid blood. On removing the brain from its cavity the left angular gyrus was observed to be destroyed, its structure was disintegrated and granular-like, and it presented a cavity the size of a marble, in which rested an irregular gummatous-looking mass, arising from the dura mater. A cavity, the size of a pea, was observed in the white matter of the right hemisphere, about its middle superior, and to the outside of the ventricle, and the white substance of the frontal lobe of the right hemisphere had a curdy appearance, adhering to the handle of the knife when passed along it. The lateral ventricles contained two drachms and a half of dirty-brown serum. The right corpus striatum on section was found disintegrated and granular-like. The left optic nerve, previous to its junction with the right to form the commissure, appeared converted into a soft, dirty-yellow, gelatinous substance, with no trace of nerve structure. The floor of the fourth ventricle presented a yellow gelatinous appearance, and its left half was softer than the right. Arteries at base atheromatous.—Thorax: Cartilages of ribs ossified. Right lung universally and firmly adherent to costal pleura, and presenting a cavity the size of a walnut at the posterior part of the lower lobe. Lung-substance on section exuded a prune-juice-like fluid. Left lung apparently normal. Commencement of aorta atheromatous; aortic valves presenting ossific deposits, about the size of barley-seeds, in their substance. Mitral valve thickened. Weight of encephalon, 43 oz.

CASE 3.—J. C.—, a male, aged forty-five, admitted the 2nd May, 1873. Has been married sixteen years. His wife states that for the first twelve years of their married life he was a kind and affectionate husband, regular in his habits, and very industrious; at the end of this time he was knocked down and robbed one night, and kicked on the head in the neighbourhood of the right frontal region. Six months after he received the kick on the head he began to suffer from intense frontal headache, generally during the night. He would sit up in the bed, clutch his head in his hands, and shriek from the suffering he endured. Three years and a half ago (six months after he was kicked) he had an epileptic fit during the night, was convulsed, and foamed at the mouth. Never had any fit previous to this time, but the fits recurred about once a week afterwards. Three or four weeks after the first epileptic seizure, he went with his wife to Kew Gardens, where he began to steal fruit, and would have been apprehended had his wife not interceded for him. In the course of the same week he stole some meat from a butcher's shop, and a marked change in his conduct was noticed. He became abusive to his wife, speaking to her in obscene and filthy language, cursing, striking, and attempting to kill her. He also made frequent attempts to set the house on fire, and on several occasions his wife had to take refuge in the streets to escape from his violence. He was sent to the workhouse, and from thence to an infirmary, where, after a residence of several months, appearing much relieved, he was taken out by his wife. After a short stay at home he again became unmanageable, was sent back to the workhouse, where he remained till he was brought to the asylum.

On admission his bodily condition was bad; he could scarcely walk, and had a troublesome cough. During the first five weeks of his residence he gained strength, and began to do a little work in the wards. He was then seized with epileptiform fits, having several at a time, with complete intermissions of a week. His mental state was weak; he seemed to have little heart to do anything, or to move about except when obliged, and took no interest in the affairs of the ward. Latterly his fits were more frequent and more severe, often being continuous for four or five hours at a time. He was observed whilst having the fits to be more convulsed on the left than the right side. At times, when free from fits, he was apparently quite sane, at other times was rambling and incoherent in his conversation, often swearing, stating that he was being drawn along the streets in a carriage, that the asylum was to be burned down, refusing to recognise his wife, swearing at and otherwise abusing her when she visited him one day, and on the next speaking kindly to, and being pleased to see her.

Shortly before his death he began to refuse his food, and required feeding, but was always willing to take gin or brandy when it was given to him. Died on Oct. 15th, 1873, of exhaustion from epilepsy and phthisis pulmonalis.

Autopsy, eighty-three hours after death.—Temperature 54°F. Rigor mortis absent. — Head: Measurement of occipito-frontal, seven inches; temporal, three inches and a half; frontal, four inches. Calvaria normal. The dura mater covering the inferior, middle, and superior frontal gyri on the right side was found thickened and adherent to the brain-substance, presenting on section a fleshy appearance. The adhesions to the surface of the convolutions were dependent on numerous masses of grey miliary tubercular matter, about the size of barley-seeds, springing from the dura mater. The membrane, on its detachment, brought away pieces of brain-tissue, and the brain-substance at this part was disintegrated and softened. The ventricles contained three drachms of clear fluid, and their lining membrane was granular. The brain-substance generally had a pasty appearance.—Thorax: The exocardium presented a thickened, milky-white patch, three-quarters of an inch long by half an inch broad, oval in shape, about the middle of the left ventricle. The right pleural cavity presented numerous shreds of dirty, yellow-looking lymph. Both lungs were completely infiltrated with grey miliary tubercular deposit, and both contained cavities, one of them being as large as a small orange.—Abdomen: The capsule of the spleen presented a milky-white patch, similar to that described as existing on the exocardium, only larger and thicker. The kidneys were contracted, and presented a waxy appearance. Weight of the encephalon, 44½ oz.

The principal symptoms observed during life in the foregoing cases, together with the chief brain lesions found on post-mortem examination, are given in the following table:—

Symptoms.		
CASE 1.	CASE 2.	CASE 3.
Pain in face constant, but irregular in severity.	Pain in frontal region intense, but irregular in its occurrence.	Pain in frontal region intense in severity, but irregular in its occurrence.
A complete change in habits and disposition, from virtue to vice.	A complete change in habits and disposition, from virtue to vice.	A complete change in habits and disposition: from being honest and kind to wife, took to stealing, &c.
Delusions, aphasia, and paralysis, with apoplectic form seizures.	Delusions, paralysis, loss of sight and hearing, epileptiform seizures.	Delusions and epileptic fits.

Post-mortem Appearances.

CASE 1.	CASE 2.	CASE 3.
Tumours, fibrous and osseous, arising from dura mater pressing on superficial brain-substance.	Tumour, gummatous, arising from dura mater pressing on and destroying brain-substance, &c.	Tubercle, arising from dura mater pressing on and destroying superficial brain-substance.

An examination of these cases shows,—first, that the deposits originated from the membranes; and second, that there was a great change in the character and conduct of the individuals, coincident with the first appearance of the disease in the brain-membranes.

1st. Adventitious deposits found in the brain are regarded by some pathologists as invariably arising from the membranes, whilst by others they are considered often to originate directly from the nerve-tissue. If the recorded cases of tumours found in the brain, having no connexion with the meninges, are carefully examined, it will be seen that, although no direct contact with the membranes was observed, still they were always found in the neighbourhood of a membranous structure. It is quite possible that a tumour arising, say, from the lining membrane of one or other of the ventricles, from the sheath of the optic nerves, or from the covering of the pituitary body, may produce an amount of softening and disintegration in the surrounding

nerve-tissue sufficient to make it impossible to exactly determine its place of origin. In the three cases recorded the tumours originated directly from the dura mater, and they go to support the opinion of those who hold that tumours in the brain must in all cases take their rise from one or other of the membranes that form the coverings of the brain-tissue proper.

2nd. Changes from a moral to an immoral mode of life, in persons at an age when it is generally considered that character and disposition have been fully formed, are not uncommon. These changes take the shape of dissipation, lying, stealing, and excesses in all their worst shapes, ending in paralysis, confinement in asylums, a merely vegetable existence, and early death. Individuals so afflicted are too often regarded as their own destroyers, and are pointed out by psychologists of a certain class as the victims of their own excesses. It is difficult to believe that a man or woman at the age of forty years, in comfortable circumstances, will, without any external reason, such as loss of means, friends, or position, forsake their homes and relations to plunge recklessly into those vices which degrade men, and with which for half a lifetime they had no sympathy.

Abuse of alcohol, in one or other of its forms, is known to produce a specific type of insanity—viz., delirium tremens,—as the puerperal state produces puerperal insanity. That it will induce brain disease such as that exemplified in the cases narrated has yet to be proven. It is certainly more probable that in such cases the brain-changes exist first, and that the transgressions of the laws of morality so frequently met with are their sequelæ, and must be placed in the same category with loss of memory, dementia, and paralysis, from which there is no escape by any effort of a person so afflicted.

BRIEF RECORDS OF INTERESTING CASES OCCURRING IN OPHTHALMIC PRACTICE.

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Cases illustrating the Treatment of Amaurosis by Hypodermic Medication.

CASE 1. — Henry H—, aged twenty-five, moulder, Rock Valley, Mansfield, was led into my consulting-room by his mother. He appeared quite blind, and could not distinguish large articles of furniture, such as mirrors &c., with which he was in close proximity; he could not guide himself, though he made out with some difficulty the large "A" of Snellen's type, a letter four inches long. On examination I found he was suffering from simple white atrophy of the optic discs in both eyes, and at once injected the twelfth of a grain of nitrate of strychnia under the skin of the brow; this was done night and morning for four days. On the evening of the fourth day he was rather behind time, and apologised by saying that he had been to see his mother off by the train, as he had no further occasion for her services; in fact, his sight improved so rapidly that he desired to return to work at the end of a week's treatment; I persuaded him, however, to stay a fortnight longer, after which he resumed his occupation. This young man had never learned to read, but he could readily make out letters of "pearl" type and see a considerable distance after a fortnight's treatment. He had been blind for six months, and there was no constitutional cause or cerebral defect to account for his loss of vision.

CASE 2. — Thomas A—, aged twenty-seven, private in the 14th Hussars; discharged from the service on account of imperfect sight two years ago. At the time of his discharge he could just guide himself, but could not see to salute his officers. After his discharge he got gradually worse, until he applied to me on Friday, June 12th, 1873, when I found that he could not distinguish the large "A" in Snellen's type, that he required a guide, and that, in fact, although he had good perception of light, all useful vision was abolished. I at once treated him by the hypodermic