

abnormal was found. The tumour was a glio-sarcoma of the caudate nucleus, rapidly growing and projecting into the frontal lobe, pressing on and infiltrating the bundles of fibres coming from the frontal lobe to the internal capsule. The posterior part of the tumour was pressing on the internal capsule and would thus account for the motor paresis. The greatly increased amount of cerebro-spinal fluid with the accompanying increase in intracranial pressure explained the gradually increasing stupor. The several connexions of the frontal lobe with other parts of the brain would assist in explaining the mental condition of our patient. Our reason for recording this case is to add another to the list of lesions of this region already reported, where it has been possible to localise the site of the lesion before death.

TWO CASES OF TETANUS TREATED BY ANTITETANIC SERUM.

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As the serum treatment of tetanus is still on its trial I think that no apology is needed for the following brief records of two cases which have recently been under my care in the Royal City of Dublin Hospital.

CASE 1.—The patient, a male, aged 34 years, was admitted to hospital on Oct. 31st, 1904, suffering from severe burns of both hands and legs, the result of his bed taking fire from the ashes of his pipe while he was asleep. He was found by his wife unconscious in bed with the bedclothes smouldering. Both hands and wrists were severely burned, three fingers on the right and two fingers on the left hand being completely destroyed. The burns on the lower extremities were less severe and were situated chiefly around the ankles and heels. After admission the temperature rose gradually and reached 103.6° F. on the fourth evening; it fell to 100° by the seventh morning and remained between 99° and 100° for a week and the patient appeared to be doing well. The temperature rose to 101° on the fourteenth evening but came down the next morning.

On Nov. 16th—that is, the seventeenth day after the accident—the patient complained of some stiffness of his neck. During the day this increased and in the evening there were some stiffness of the jaws and difficulty in opening the mouth fully. He was removed to the observation ward and powders containing 30 grammes of chloral hydrate and one drachm of bromide of potassium were ordered to be given by the rectum every six hours. On Nov. 17th the patient had frequent spasms during the day, chiefly affecting the abdominal muscles and lasting only two or three seconds; he was given a subcutaneous injection of ten cubic centimetres of Pasteur's antitetanic serum in the morning. He lay on his back with the knees drawn up, head and neck very rigid, and teeth clenched, but was able to take fluid nourishment well. The temperature at 4 P.M. was 96.8° . He was very restless during the night and had very frequent spasms. While under observation he had 31 distinct spasmodic contractions of the abdominal muscles in two minutes; after this chloroform was administered to induce sleep. He slept only at short intervals for about four and a half hours. On the 18th the temperature was 103.4° . He had constant spasms. Ten cubic centimetres of antitetanic serum were injected into the spinal canal by lumbar puncture. The spasms became more severe and the patient died at 1 P.M., the temperature rising to 107° an hour before death and remaining at that level till the fatal termination.

CASE 2.—A youth, aged 19 years, was admitted to hospital on the evening of March 9th, 1905, complaining of stiffness of the jaws and difficulty in swallowing. Three weeks before he got a splinter of wood under the nail of his right middle finger; it was removed at once and on admission the wound was completely healed and gave no pain. On Sunday, March 5th, probably the eighteenth day after the accident, the patient first noticed the stiffness which gradually became worse and pain appeared in the neck and shoulder. The bowels had not been opened since the previous Monday. He was unable to swallow anything except liquids. On examination risus sardonicus was well marked, he was unable to open his mouth more than half an inch, his tongue could only be protruded to a very slight extent, and marked contraction of the masseters, some opisthotonos, and contraction of the

abdominal muscles were present. There were no stiffness or contraction of the muscles of the extremities and no spasms. The temperature on admission was normal and remained so throughout his stay in hospital.

The patient was ordered a large simple enema which had a very good result. He was ordered powders containing one drachm of bromide of potassium and half a drachm of chloral hydrate by the rectum every six hours. On March 10th he had slept for six and a half hours during the night. He felt better except for the stiffness of the neck which had increased. Ten cubic centimetres of Pasteur's antitetanic serum were injected subcutaneously. He passed a quiet day, he had no spasms, and his neck was less stiff in the evening. In the evening one slight spasm was observed while the patient was half asleep. On the 11th he had slept well during the night and was feeling better though his neck seemed stiffer. Ten cubic centimetres of antitetanic serum were injected. He slept a good deal during the day. On the 12th he had slept all night. His neck was still very stiff. The abdominal muscles were very hard and well-marked opisthotonos was present. Ten cubic centimetres of antitetanic serum were injected. He was better able to open his mouth. On the 13th he had slept well all night. Ten cubic centimetres of antitetanic serum were injected. The patient was given some bread soaked in milk and beef-tea which he swallowed without difficulty. He was feeling much better, though the stiffness of the neck still continued and there was pain in the chest on drawing a deep breath. On the 14th he had slept all night. He had no pain in the chest, his neck was less stiff, and he was able to open his mouth better. The powders were ordered to be given every eight hours. From this time onwards the course of the case was uneventful, though the contraction of the abdominal muscles and the stiffness of the neck disappeared very slowly. On March 24th the powders were stopped and on the 31st the patient was allowed out into the grounds and was discharged on April 7th.

These two cases present a marked contrast to one another. In both the incubation period was long, in the first case 17 days and in the second case probably 18 days. In both the temperature was normal on the first appearance of the symptoms, in the second case it remained normal throughout the course of the disease; but in the first case after a preliminary fall it rose rapidly through 10.2° in 20 hours. In both cases the treatment was the same—i.e., injection of serum and the administration of large doses of bromide of potassium and chloral hydrate by the rectum. In the one case death occurred within 60 hours of the onset of the first symptoms whereas the second patient recovered. In the first case the spasms were both frequent and severe, while in the second only one was observed. Case 1 may, I think, be regarded as hyperacute in spite of its long incubation period and Case 2 was certainly chronic. The only conclusion that I can draw from these two cases is that the result was due to the degree of infection and was not materially altered by the treatment.

Dublin.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Bacillus Influenzæ as a Cause of Endocarditis.—Gonococcus Endocarditis.—The Vitality of the Typhoid Bacillus in Shell-fish.

A MEETING of this society was held on April 18th, Dr. E. KLEIN, Vice-President, being in the chair.

Dr. T. J. HORDER read a paper on the *Bacillus Influenzæ as a Cause of Endocarditis* and dealt with two cases of influenza septicæmia in which the bacillus was cultivated from the blood. The first case was that of a man, aged 31 years, who was admitted to St. Bartholomew's Hospital in May, 1904. Blood cultures were undertaken upon four separate occasions and were positive each time. Some of the cultivations obtained consisted of very large numbers of colonies, as many as 100 per cubic centimetre of blood. The method adopted was to puncture a vein with a sterilised needle attached to a five cubic centimetre glass syringe and to inoculate broth and agar tubes immediately. The morphological and cultural