CASE OF CEREBRAL TUMOUR IN WHICH THE INITIAL SYMPTOMS WERE CHIEFLY SENSORY IN THE ARM AND FACE. SUDDEN AGGRAVATION WITH LOSS OF HEARING IN CORRESPONDING EAR.

Post-Mortem.—Tumour found in White Substance chiefly involving Posterior Part of Internal Capsule.

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PERCY B., aged 16, was admitted into John ward on January 3, 1895. He had been in good health until six months ago when he had a blow on the side of the head with a pillow. He immediately felt dizzy, could not speak plainly, and had a feeling of numbness in the fingers of the left hand, a peculiar feeling in his face, and he said he could not laugh properly. He had no pain, did not vomit, and slept well afterwards. Ever since then he has had pain in the head, has felt weak in the left hand, has been liable to drop things, and has had numbness in the finger and palm. Occasionally a sudden pain would shoot down the arm, causing it to jerk irregularly; more rarely down the left leg, causing it to give way. He could walk and run well, could stand with his eyes shut, was not giddy, and was quite able to do his work until admission.

About three months ago his sight began to get a little weak, but it was not till a month ago that it became misty. Headache he had all his life long, but it had been worse since the blow, and has been felt recently in the frontal region, especially on the right side, and has been aggravated by cough or exertion. Five months ago he began to be troubled with vomiting, which has recurred on and off ever since.

On examination the lad looked well, and there was really nothing to note, except that there was slight weakness in the left hand, but very little in the grasp, and that the sensation over the left arm in the hand and palm was distinctly impaired, but only very little. On examining the eyes there was found to be well marked double optic neuritis. Both discs were enormously swollen, but the swelling was in excess of effusion, for the vessels were tolerably distinct all over, and there were no patches on the retina. It was the condition which is usually described as "swollen discs." It was thought that the sensation in the left leg, and also in the left side of the face, was slightly impaired too, but it was very indefinite. The epigastric, abdominal and cremasteric reflexes were all weak on the left side but active on the right. The knee-jerk was absent on both sides.

What brought him into the hospital was his loss of sight and the peculiar sensations in his arm. He did not seem seriously ill on admission.

The diagnosis was made of cerebral tumour, possibly, it was thought, of a tubercular nature. A few days later he became very much worse, had more headache, vomited several times, and was more drowsy and apathetic. Some weakness was observed in the leg, and the sensation was distinctly impaired there, while the weakness of the left hand and the loss of sensation were more marked. At the same time the movements of the left side of the face were distinctly impaired, and the sensation also was obviously defective. The pupils, which had been equal throughout, reacted now sluggishly to light as well as to accommodation, but remained equal. On January 17 the patient was very much more drowsy and had passed water under him. The hearing was noted now to be defective. He could only hear a watch one inch away with the left ear, while the hearing on the right side was fairly acute. The other symptoms were much the same though slightly aggravated.

The diagnosis having been made of cerebral tumour, and the father, when he was informed that no surgical operation could be performed, nor any special treatment recommended, decided to take the patient home, where two days later he died.

A *post-mortem* examination was made.

The interest of the case lay in the diagnosis of the seat of the new growth. From the predominance of sensory symptoms from the first, which were more or less *hemiplegic in type*, it seemed that the tumour must exist in the white substance of the brain, and probably in such a position as to interfere with the posterior

portion of the internal capsule. In this connection it was very interesting to note the loss of hearing which developed towards the end of the case at the same time as the *hemiplegic* symptoms became more marked. On opening the skull the right side of the brain was noticed to be more prominent than the left, but no tumour was visible on the surface. On section, a tumour was found as large as a walnut, lying in the white matter to the outer side of the lenticular nucleus.

The bulk of the tumour was above the level of the *basal ganglia*. The lower and posterior part was surrounded by an area of softening which involved the whole of the external, and the hind extremity of the internal capsule, and extended backwards into the occipital lobe and downwards somewhat into the temporo-sphenoidal lobe. There was some small hæmorrhage in and around the tumour, the whole brain on that side being softer and more watery than normal. The tumour proved to be a *glio-sarcoma*.

Its seat fairly well explained the symptoms observed during life. The vision we might have expected to be different on the two sides, but the fields of vision were carefully examined during life and were only found to be symmetrically reduced. I suppose that the tumour must have existed for some time, and that the recent symptoms must have been due to the development of the softening, which proved to be so extensive on *post-mortem* examination.