TWO BENIGN NEOPLASMS SUCCESSFULLY REMOVED FROM THE CENTRAL NERVOUS SYSTEM AT AN INTERVAL OF TWENTY YEARS

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MULTIPLE neoplasms of the central nervous system, other than those of von Recklinghausen's disease, have often been described. On the other hand, benign tumours appearing at intervals of time in the central nervous system is an exceedingly rare occurrence. The object of the following account is primarily to put on record such a case.

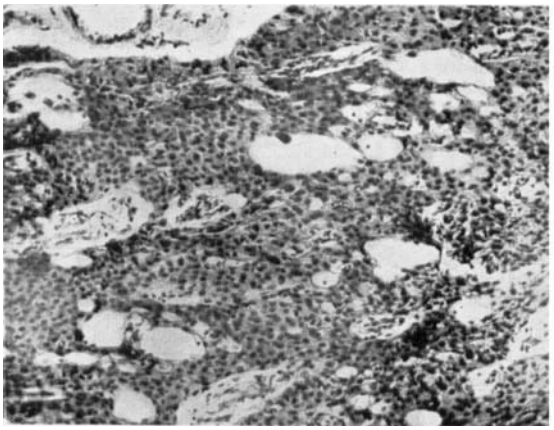

FIG. 799.—Histological section of the meningioma.

CASE REPORT

The patient, a woman of 38 years, came under the care of Professor F. J. Nattrass in the Newcastle Royal Victoria Infirmary in 1928. There was a history of subjective sensory disturbances in the left thigh for five years, impaired power in the left leg for one year, and headaches for one month.

On examination, positive findings were as follows :—

a. Bilateral papilloedema.

b. Loss of deep sensation in the joints of the left hand and foot.

c. Defective tactile discrimination in the left hand.

d. Left-sided hemiparesis.

A diagnosis was made of a right-sided parasagittal meningioma and the patient was referred to one of us (G.G.T.) for surgical treatment.

FIRST OPERATION (August, 1928—G.G.T.).—First a suitable skin-flap was turned. Then a quadrilateral of bone overlying the tumour was raised by means of linking a series of trephine holes with a chisel and mallet. On opening the dura a circumscribed tumour was seen nestling against the superior longitudinal sinus, with its deep surface buried in the brain tissue. The tumour was gently separated from the brain tissue and turned upwards over the superior longitudinal sinus, its attachment to the edge of the sinus being divided between artery forceps. To stop the bleeding the cavity of the tumour was packed with gauze, one end of which was led to the exterior. The bone-flap was replaced and the skin sutured. A few days later the gauze pack was gently removed and the wound healed by first intention.

The patient made an uninterrupted recovery from the operation and, apart from a mild hemiparesis, her neurological recovery was excellent.

The tumour removed was proved histologically to be a meningioma or dural fibroblastoma (*Fig.* 799).

The patient remained well until May, 1948, when she began to suffer from pain in the small of the back and upper part of the left buttock. The pain increased and after a few weeks became localized to the left hip region. In August of that year a further symptom developed of a burning sensation down the outer side of the left thigh.

Again she came under the care of Professor Nattrass. On examination, the positive findings were as follows :—

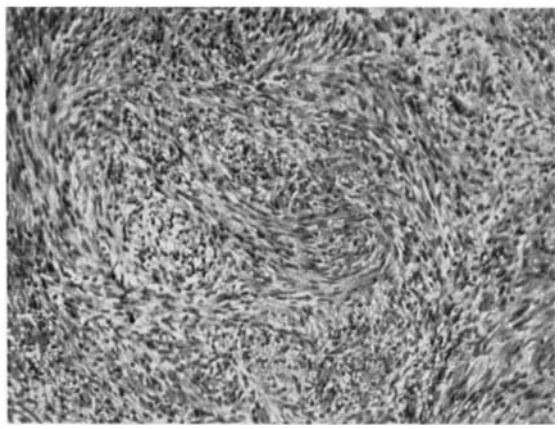

FIG. 800.—Histological section of the neuroma.

a. Mild left-sided hemiparesis (old-standing).

b. Marked restriction of spinal movements.

c. Tenderness over the left sacro-iliac joint.

Radiographs of the spine were normal. The protein content of the cerebrospinal fluid was proved to be 180 mg. per cent.

A diagnosis of a posterior root neuroma was made and the patient was transferred to the neurosurgical unit, where the diagnosis was confirmed and the level of the tumour established by a cisternal injection of lipiodol.

SECOND OPERATION (Oct. 15, 1948—G.F.R.).—Under general anæsthesia a laminectomy was carried out and a posterior root neuroma removed. (*Fig.* 800.) The operation presented no technical difficulties. The patient made a good recovery and was on her feet within 17 days.

In November, 1950, the patient reported on her present condition as follows : "I am very pleased to tell you I am very well and am able to do practically everything I did before the operation on my back."

COMMENT

According to American pathologists, meningiomata and posterior root neuromata are of very close pathogenesis, both being immature forms of fibromata and therefore named fibroblastomata. The alternative names of meningiomata and neuromata are dural fibroblastomata and perineural fibroblastomata. Both types of tumour are essentially benign, although meningioma cells tend to travel widely in the venous channels.

Finally, it is of interest to note that without the help of modern machines and tools a difficult operation on the brain can be carried out if first surgical principles are observed.