Short report

Ganglioneuroma arising in the pituitary fossa: a twenty year follow-up

RAOLD SEREBRIN, DAVID M ROBERTSON

From the Department of Pathology, Queen's University and Kingston General Hospital, Kingston, Ontario, Canada

SUMMARY A ganglioneuroma arising in the pituitary fossa is described. The lesion behaved as an indolent but progressive neoplasm rather than a hamartoma.

In 1964 one of us (DMR) reported a case of a ganglioneuroma arising in the pituitary fossa. At that time the report served to demonstrate that the tumour was truly intrasellar and not attached to the hypothalamus. This relationship was not specified in the only case reported prior to that date. Since then, further cases have been reported in this location and there has been a resurgence of interest in the biologic behaviour of these unusual ganglion cell lesions. In order to contribute to the understanding of their behaviour we submit a postmortem follow-up of our original case report.

Case report

In February 1963 a 45-year-old housewife presented with a five year history of headaches. Neurologic examination, including perimetry, was unremarkable; the impression was that she had tension headache. A skull radiograph revealed an enlarged sella turcica with an intact floor and a pneumoencephalogram indicated a small suprasellar extension of an intrasellar mass. A right frontal craniotomy was performed. A meaty, red tumour was seen to rise up out of the sphenoid bone directly below the pituitary fossa was a firm, grey rounded mass measuring 8 x 10 mm.

Address for reprint requests: Dr David M Robertson, Department of Pathology, Queen's University, Kingston, Ontario K7L 3N6, Canada.

Received 12 July 1983. Accepted 6 August 1983
Ganglioneuromas have been variously regarded as true neoplasms and as hamartomas. This case illustrates that a ganglioneuroma in this location may behave as a truly progressive neoplasm with an exceedingly indolent course. Such behaviour runs contrary to the opinion of some workers that mature ganglion cell tumours are more appropriately considered hamartomatous in nature. Nevertheless the growth of these lesions is difficult to explain if one accepts that mature ganglion cells are incapable of cell division. Secondly, although neoplastic transformation of these lesions is well recognised, when it occurs it usually takes place within the astrocytic element, an element not identified in our case. Finally, although transitional forms of tumours containing primitive neural elements have been demonstrated, no features were present in our case to suggest dedifferentiation into more primitive neuroblastic elements.

References