Prolonged survival following excision of dural chondroma

Case report

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A patient is reported with a survival period of 44 years following excision of an intracranial chondroma.

Key Words • intracranial chondroma • osteochondroma

Intracranial tumors of cartilaginous origin are rarely encountered. Most common are those at the base of the skull, while those that occur either intracerebrally or over the convexity are less frequent. The following case is reported because of the patient's prolonged survival following complete excision of this unusual tumor.

Case Report

This 22-year-old woman presented in January, 1931, with a 1-year history of frontal headache and intermittent dizziness. She also complained of a progressive weakness in the right arm and leg, of 6 month's duration. There had been intermittent emesis for the previous 3 months.

Examination. Physical examination revealed a well developed woman with a right spastic hemiparesis and papilledema. X-ray examination of the skull was unremarkable except for thinning of the dorsum sellae and posterior clinoids. A pneumoencephalogram was performed and revealed depression and obliteration of the frontal horns of both lateral ventricles. This study was felt to be consistent with a left frontal tumor.

Operation. A left frontoparietal craniotomy revealed an intradural, extracerebral tumor attached to the convexity of the dura mater and the sagittal sinus. The tumor was distinctly firm, but could easily be separated from the underlying brain by a distinct cleavage plane, and was totally removed by digital dissection. Bleeding from the sagittal sinus was controlled with silk sutures.

Postoperative Course. The postoperative course was uneventful. A follow-up letter received in January, 1975, reported that the patient was alive and well, 44 years after the removal of her tumor.

Pathological Examination. The gross specimen consisted of a 250-gm tumor mass of irregular pyramidal shape. The surface was irregular and made up of multiple small lobules covered by a thin, transparent membrane (Fig. 1). The tumor was hard and...
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pearly white. At the base was an irregular piece of dura, thickened and densely adherent to the tumor mass.

Light microscopic examination revealed a nodular proliferation of neoplastic cartilage cells (Fig. 2 left). The chondrocytic cell population was uniform and separated by abundant intercellular chondroid matrix (Fig. 2 right). Mitoses were inconspicuous.

Discussion

The literature on dural chondromas has been reviewed by Alpers, Chorobski, et al., and more recently by Berkmen and Blatt. Intracranial tumors of cartilaginous origin are uncommon, particularly those arising from the convexity or parasagittal region. In general, patients present with a history of a slowly growing mass lesion, manifested either

Fig. 1. Gross tumor specimen.

Fig. 2. Photomicrograph of the tumor. Left: The neoplasm is divided into lobules of mature cartilage cells. H & E, × 160. Right: The individual cells are uniformly of small size and lie in lacunar spaces. Abundant hyaline cartilage matrix comprises the intercellular substance. H & E, × 400.
Intracranial chondroma

by focal seizures or a progressive deficit. Surgical excision has been reported in several other instances but information regarding long-term prognosis is scant. The present case is of interest because of the extended survival of our patient, implying that a good result may be anticipated following total removal of this tumor.

References

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