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Reference No:

Clinical Abstract:

A 24-year-old woman experienced progressive visual problems and underwent craniotomy for a suspected pituitary tumor. A biopsy was unrevealing. Based on clinical and radiologic findings, a diagnosis of craniopharyngioma was favored and the patient was irradiated. Clinical symptoms subsided.

Five years later, she developed confusion, right hemiparesis, right facial weakness and urinary incontinence. CT scan showed enlargement of the ventricles and a large midline tumor at the base of the skull that enhanced with contrast. An angiogram showed evidence of a large suprasellar tumor mass extending up to the foramen of Monro. A craniotomy revealed an unremovable vascularized tumor surrounded by gliosis. A V-P shunt was placed. A biopsy was performed.

The patient gradually deteriorated over a three year period. Steroids were instituted following the onset of lethargy. CT showed a mass in the suprasellar area extending into the third ventricle without enlarging the sella turcica. The mass enhanced with contrast; angiography showed a highly vascular pattern. Dense gliosis was encountered during an attempt to debulk the tumor and the operation was limited to a biopsy showing extensive astrocytic proliferation.

Postoperatively, she never regained consciousness and died of aspiration pneumonia and GI bleeding one month later.

On gross examination of the brain, a firm tumor mass was present at the base. The skull showed no evidence of tumor involvement. The tumor occupied the suprasellar region, compressing the hypothalamus and extending into the third ventricle. The optic chiasm and optic nerves were only slightly flattened and appeared normal. The posterior communicating artery was pushed up by the tumor mass and elongated. Coronal sections of the cerebrum revealed a circumscribed mass measuring $2.5 \times 3 \times 3$ cm with a gray-white, homogeneous appearance and a rubbery, firm consistency. The surrounding brain was firm. The right frontal lobe showed cystic degeneration with softening. The pituitary gland was compressed. The autopsy material was similar to the biopsy material from the second craniotomy described above.

Material submitted: 1 H&E stained and 1 unstained section from second biopsy

Points for discussion: 1. Diagnosis