Suprasellar Teratoma

Case reports

An 18-year-old girl presented with progressive visual disturbance, headache, weight loss, and fatigue for 2 weeks. She had decreased vision in her right eye and double vision when looking to the right side. On examination, she had right-side complete abducens nerve palsy and partial oculomotor nerve palsy bilaterally. Brain imaging revealed a large suprasellar lesion consistent with a germ cell tumor. The patient underwent a transnasal endoscopic resection of the lesion. Pathology showed a mixed germ cell tumor (80% mature cystic teratoma, 18% yolk sac tumor, and 2% germinoma). The mature teratomatous elements identified included skin with sebaceous material, hair, cartilage, acini, colonic mucosa, muscle, nerve bundles, and adipose tissue. Postoperative magnetic resonance imaging (MRI) showed a residual tumor in the left cavernous sinus and anterior clinoid process superiorly. At a 1-year follow-up, the double vision had resolved, and her vision showed progressive improvement. The patient was maintained on treatment for diabetes insipidus, hypothyroidism, and adrenal insufficiency. Her last MRI showed no signs of tumor progression.

The present case demonstrates a safe endoscopic transnasal surgical resection of a rare suprasellar tumor, mixed teratoma, with intra-axial extension. The endoscopic transnasal approach can be considered a valid option for a suprasellar lesion [1].

Erratum: Endoscopic Transnasal Resection of Suprasellar Teratoma [2].

A ten-year-old girl initially presented with a large suprasellar mixed malignant GCT with a near-complete response after initial induction chemotherapy and irradiation. Three and half years after initial therapy, she presented with progressively worsening vision in her left eye. Magnetic resonance imaging showed infiltrative changes within the left optic nerve but no discrete mass. Serum and cerebrospinal fluid (CSF) tumor markers were not elevated and CSF cytology was negative. Left optic nerve biopsy confirmed the presence of mature teratoma and pure germinoma components. She was treated with gross-total resection of the left eye and optic nerve and chemotherapy. Histopathologic evaluation of the optic nerve showed only mature teratoma elements but with pure germinoma cells infiltrating the inner layers of the retina.

Loco-regional extension of suprasellar GCT to the optic nerve is not uncommon; however, infiltration of the tumor into the retina is not reported in the literature. Early detection of optic pathway involvement and proper delineation of the irradiation field may prevent GCT infiltration of the retina with subsequent vision loss [3].

Unclassified

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