Congenital craniopharyngioma treated by radical surgery: case report and review of the literature.

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Abstract

PURPOSE: Craniopharyngiomas are 5-10% of all pediatric tumors, but are seldomly encountered in the perinatal period. Only seven instances of a truly antenatal diagnosis of a congenital craniopharyngioma that subsequently underwent radical surgery have been reported. We present the case of a patient who received the diagnosis of a suprasellar tumor during the prenatal period and received radical surgery.

METHODS: We report a case of a neonatal craniopharyngioma treated surgically.

RESULTS: The pregnancy progressed uneventfully until a routine ultrasound at 37 weeks of gestation showed a 15 x 15 mm high echoic mass in the center of the fetal head. Neonatal Gd-enhanced T1-weighted MRI at 5 days of life showed a homogenously enhanced mass (16 x 22 x 15 mm) in the sellar and suprasellar lesion. As the tumor showed rapid growth at the 3rd month of life, the patient underwent a surgical treatment and the mass was totally removed. Three years later, the physical and mental development of the patient was normal, and Gd-MRI studies showed no tumor recurrence.

CONCLUSION: The present case is the eighth case of a truly antenatal diagnosis of a craniopharyngioma that underwent successful radical surgery. Craniopharyngioma is a benign tumor and thought to be a slow growing tumor in childhood. The results of radical surgery were very poor, and the mortality and morbidity rates were high in the previous reports due to the huge size of tumor at operation. The present case demonstrated the rapid growth in short interval of Gd-MRI. This is the first report of tumor kinetics of congenital craniopharyngioma with previous reports. The calculated tumor doubling time in our case was 37 days.
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