Orbito-Cranial Teratoma
A Case Report

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With 8 Figures

Summary

A case of congenital orbito-cranial teratoma is presented. Histological examination of this extremely rare tumour revealed unusual tissue elements derived from all three germinal layers.

Keywords: Teratoma; orbital tumour; orbito-cranial teratoma.

Orbital teratomas are rare 1. Bartholdson 2 found only fifty cases in the literature. According to Jensen 5 teratoma is derived from three germinal layers, and when it is composed of two layers it should be named teratoid. He also stated that a total of forty cases of real teratoma have been found in the literature.

Orbital teratomas show rapid growth in spite of their commonly accepted benign character; they are unilateral, and the majority are located in the left orbit. A case of bilateral teratoma has been described by Gemolotto and Gaipa 4. In cases of orbito-cranial teratoma of orbital origin, the teratoma extends to the cranial cavity by the sphenoidal route or through the optic foramina.

Case Report

Patient S. I., a three-month-old boy, was admitted to the Aegean University on 8 March 1978 with protrusion of the right eye and limited ocular movements. There was a 4 cm protrusion of the right eyeball due to tumour inside the orbital fossa. On palpation, a solid mass that encircled the whole eyeball was detected. There was total loss of vision on the right. The left eye was normal, and detailed examination revealed no further pathology. Radiological examination revealed
enlargement of the right orbit and the soft tissue shadow of the tumour. Ultrasonography showed a right retrobulbar mass. Angiogram on the right side revealed no filling of the anterior cerebral artery.

On 15 March 1978 a surgical approach was made through the orbit, and the tumour mass was removed with the bulbus oculi; the conjunctiva and the external eye muscles were preserved. Intracranial extension of the tumour was observed during the operation. In the post-operative period a tense fontanelle and separation of suture lines were detected (Fig. 1).

On 1 April 1978 right frontal craniotomy was carried out, and a large tumour mass in the anterior and middle fossas was removed. On the second postoperative day bronchitis and generalized convulsions required prompt treatment. On 12 April 1978 the patient was discharged, and reconstructive orbital surgery was advised. Two weeks after discharge the patient suddenly died.