Cranioorbital tumor

Case series

Between April 2008 and April 2011, 35 patients with cranio-orbital tumor were treated. There were 21 males and 14 females, aged 17-73 years (mean, 46.3 years). The first symptoms were orbital pain in 13 cases, hypopsia in 12 cases, exophthalmos or abnormal eye position in 5 cases, headache and dizziness in 2 cases, diplopia in 2 cases, and pulsating eyeball in 1 case. Some of the patients needed resecting the zygomatic arch, superciliary arch, and orbit roof. The autogenous bone, titanium net, frontal bone periosteum, biogel, and artificial meninges were used to reconstruct the skull base. RESULTS: Tumors were resected by one-stage operation, and the anterior skull bases were reconstructed. Postoperative MRI indicated that total removal of tumors was achieved in 30 cases, subtotal in 3 cases, and partial in 2 cases at 3 days. There was no operative death. Cerebrospinal rhinorrhea and infection occurred at 1 week in 1 and 2 cases respectively, and were cured after lumbar drainage and antibiotics. The patients were followed up 6 to 36 months (mean, 18 months). In patients having hypopsia, the visual function was improved in 9 cases at 1 month; in patients having orbital pain, pain relief was achieved at 2 weeks after operation; in patients having exophthalmos or abnormal eye position and pulsating eyeball, sympotoms disappeared after operation. In 27 patients with benign tumor, 24 were cured, without recurrence during follow-up; in 8 patients with malignant tumor, 6 had recurrence within 18 months and underwent second operation or radiotherapy, 2 relapsed cases died of cerebral hernia and respiratory circulating failure at 24 months after operation. No complication of enophthalmos, pulsating exophthalmos, or collapse of zygomatic region occurred. CONCLUSION: Using the autogenous bone, titanium net, frontal bone periosteum, biogel, and artificial meninges to reconstruct the skull base has reliable foundation, simple operation, and easy anatomical reconstruction, so it is an effective method after the removal of cranio-orbital tumors; better effectiveness would be obtained when combining with the peroperative nursing [1].

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Jiang Y, Liu J, Fan X, Cai B. [Skull base reconstruction and peroperative treatment for cranio-orbital tumors]. Zhongguo Xiu Fu Chong Jian Wai Ke Za Zhi. 2012 May;26(5):567-70. Chinese. PubMed PMID: 22702051.