Skull base chordomas: management and results.

Abstract:
Growth patterns of skull base chordomas are related to important neurovascular structures. Local invasiveness results in "clinically malignant" behavior. A high rate of transient neurological deficits occurs following radical surgery. At our institution, the principle of radical removal is not followed at any price. This study compared the results of our management with recent series.

Eleven patients, five females and six males aged 24-65 years (mean 41 years), underwent removal of skull base chordoma with size one5 cm. Mostly, standard operative approaches were chosen. All patients underwent postoperative radiotherapy. Resection was subtotal/partial in seven patients and total in four with no mortality. Neurological deterioration occurred due to transient cranial nerve deficits in six patients. Temporary surgical morbidity (including cranial nerve deficits) was observed in seven patients. Median Karnofsky performance status score improved compared to preoperative (80), early postoperative (70), and latest assessment (90) (median 36 months). Five patients underwent reoperation due to tumor recurrence after 4-48 months (mean 24 months). Most patients undergoing removal of skull base chordomas suffer from transient neurological deficits which are mainly nonsignificant as the patients return to preoperative functional status. The apparently high rate of incomplete tumor resection (64%) reflects the infiltrative behavior and relationship with neurovascular structures. The operative strategy should not be
excessively aggressive at any price, but rather take into account the options of radiotherapy and observation of residual tumor.