

Endoscopic Endonasal Approach For Clival Chordomas

Matteo Zoli¹, Ernesto Pasquini², Giorgio Frank¹, Diego Mazzatenta¹

*¹Department Of Neurosurgery, Center Of Pituitary And Skull Base Surgery/ Ircss
Institute Of Neurological Sciences, Bologna, Italy/ Italy*

²ENT Department / Bellaria Hospital, Bologna/ Italy

Purpose:

The aim of this study is to highlight the advantages and limitations of the endoscopic endonasal approach (EEA) in the treatment of clival chordomas.

Materials and Methods:

All consecutive cases of chordoma treated with an EEA between 1998 and 2015 have been included. Preoperative assessment consisted in neuroimaging, endocrinological, neurological and ophthalmological evaluations, which were repeated 3 months after surgery and annually thereafter. All patients underwent postoperative adjuvant therapies.

Results:

Series is composed by 65 (male/female ratio: 1/0.9, median age: 48 years, IQR: 25.3). Gross tumor removal (GTR) was achieved in 47 cases (58.7%). Primary procedures (p:0.001), location in the superior or middle third of the clivus (p:0.043), extradural location (p:0.035) and histology of conventional chordomas (p:0.013) were associated with a higher rate of GTR. Complications rate was of 15.1%. Seventeen patients (26.2%) have died of tumor progression at follow-up (median: 52 months, range: 7-159). Survival rate was 77% at 5 years and 57% at 10 years. On statistical analysis, the extent of tumor removal (p

Conclusion:

The multimodal treatment strategy (EEA and radiation therapy) has allowed to obtain a satisfactory mean survival rate, particularly after GTR and for primary surgery. This approach could be a helpful tool in chordoma surgery, achieving a good balance between the more extended tumor removal as possible and the preservation of an acceptable quality of life.