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Endoscopic-assisted orbital exenteration: Technical feasibility and surgical results from a single-center consecutive series

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Abstract

The purposes of this study were to describe the endoscopic-assisted orbital exenteration surgical techniques, to report preliminary outcomes and to discuss advantages, indications and limitations of this approach. All patients who underwent endoscopic-assisted orbital exenteration at a single tertiary-care center were retrospectively reviewed. A concomitant reconstruction was performed in all cases. The extent of surgical resection was tailored to the size and location of tumor and was classified into four subtypes. A total of 40 patients were included in this series. Orbital exenteration type 1 was performed in 7 cases, type 2 in 11 cases, type 3 in 19 cases, and type 4 in 3 cases. The reconstruction was performed with a pedicled temporal flap in 5 patients and with a free vascularized flap in 34 cases. A radical resection of disease was obtained in 32 cases. After a mean follow-up of 36 months, 14 patients died of disease, one patient died of other causes, 7 are alive with disease, and 18 patients are currently alive without evidence of disease. The preliminary data emerging from this case-series support the feasibility and safety of endoscopic-assisted orbital exenteration.

Keywords: Endoscopic endonasal approach; Orbital apex; Orbital exenteration; Sinonasal malignancy; Skull base.