



Endoscopic Endonasal Resection of the Odontoid Process – Clinical Outcomes in 36 Patients.

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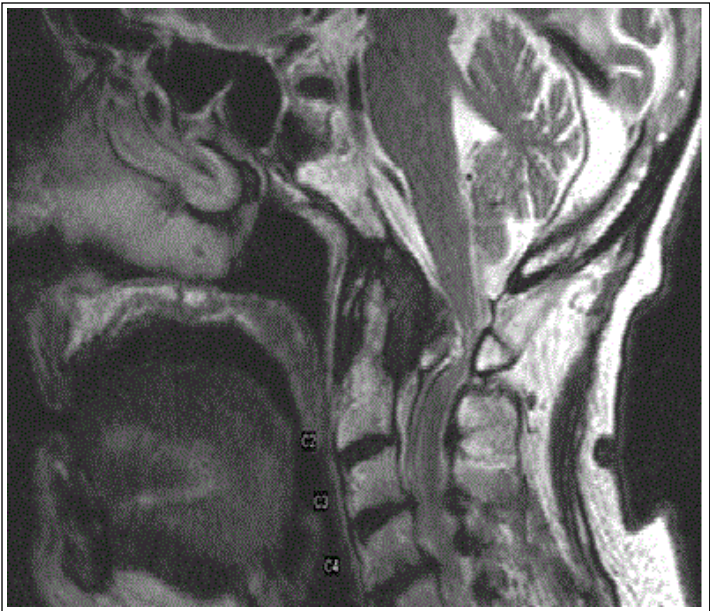


Introduction

Traditional treatment of odontoid disease from a ventral corridor has consisted of a transoral approach. More recently, the endoscopic endonasal approach (EEA) has been used to access odontoid pathology

Methods

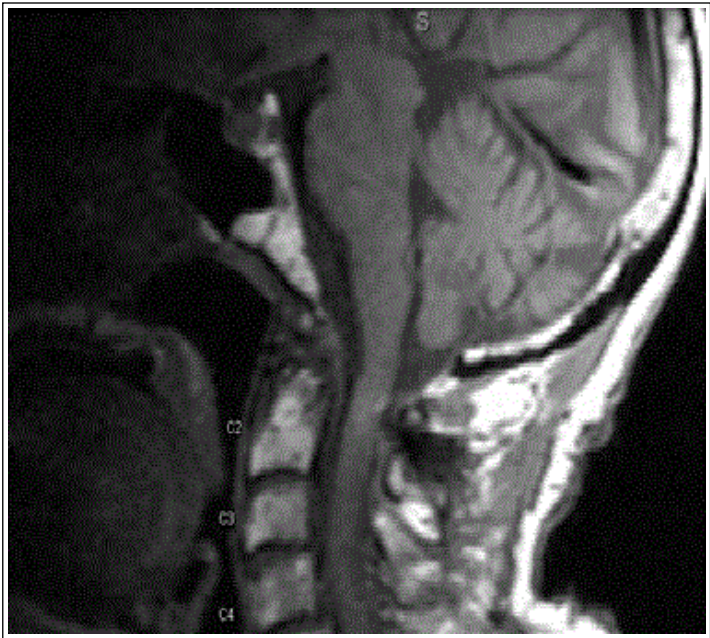
A retrospective review was conducted of all patients who underwent an EEA for access to odontoid pathology from 2004-2014. Patient outcomes, complications and post-operative swallowing function were assessed.



Results

Thirty-six patients underwent an EEA for symptomatic odontoid pathology. The most common pathology (n = 24) treated was boney compression from hypercalcification. Other pathologies included odontoid fractures, os odontoideum and metastatic carcinoma. The mean patient age was 70 years. Thirty-one patients underwent a posterior fusion. Thirty-five experienced stable to improved symptoms. One patient experienced worsening symptoms two weeks after successful anterior bony

decompression and required a posterior cervical approach for residual stenosis related to pannus. One patient developed infection in the resection bed requiring debridement and antibiotics. Three patients had intraoperative CSF leaks requiring repair with a fat graft; one of these had a post-operative leak. One patient died 8 days following surgery from an apparent cardiac arrest. Four patients developed aspiration pneumonia. NURICK and NDI data were available for 19 patients who had a mean follow-up of 39.1 months (range 3-118). The mean NURICK score post-operatively was 1.0. The mean NDI score was 7.7(range 0-24). Six patients required tube feeds for decreased oral intake, malnutrition, or lower cranial neuropathy in the perioperative setting. Fourteen patients suffered from mild form dysphasia after surgery. Of these, five had documented preoperative swallowing difficulties. All patients who had perioperative dysphasia showed improvement upon post-operative follow up.



Conclusions

A completely endoscopic endonasal approach can be performed for odontoid disease with satisfactory outcomes and low morbidity.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) Describe the outcomes following EEA for odontoid pathology, 2)discuss, in small groups, the outcomes for odontoid pathology, 3) Identify an EEA as an effective approach for odontoid pathology

References

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