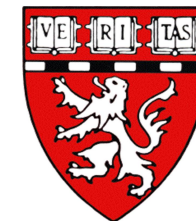




Safety and Efficacy of Endoscopic Endonasal Approach for Recurrent Pituitary Lesions

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Introduction

Reoperation for pituitary lesions has been a challenge for endoscopic pituitary surgeons due to distorted anatomy, increased scarring, and increased bleeding. These operations are thought to have a higher rate of complications and are more likely to result in incomplete resection. Few systematic studies have been reported regarding the safety and efficacy of the endoscopic approach for recurrent pituitary lesions. We report our experience of the endoscopic endonasal transsphenoidal approach for reoperative pituitary surgery.

Methods

412 consecutive patients undergoing endoscopic transsphenoidal surgery at a single institution were reviewed (April 2008 - November 2011). 81 patients with recurrent pituitary lesions were identified. Tumor types, clinical characteristics, intra-operative findings, post-operative outcomes and complications were evaluated and compared to the primary operative group (331 patients).

Learning Objectives

By the conclusion of this session, participants should be able to

- 1) Describe the utility of endoscopic approach for recurrent pituitary lesions;
- 2) Discuss the complication profile of endoscopic approach to treat recurrent pituitary lesions compared to de novo pituitary lesions.
- 3) Identify the effective treatment options for various recurrent pituitary pathologies.

Results

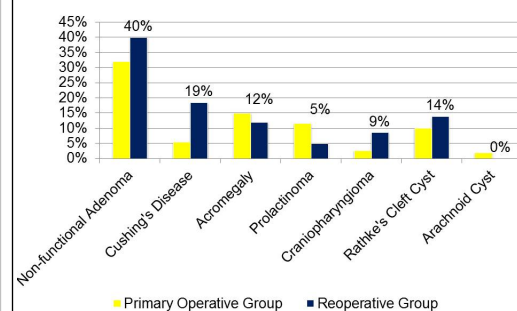
Age 18 - 80 (44.3 +/- 13.7)
45 Women (55.6%); 36 Men (44.4%)
Interval between primary operation and reoperation was 5.1 +/- 4.1 yrs.
Post-operative length of stay:

- Primary operative group: 4.4 +/- 3.4 days
- Reoperative group: 3.9 +/- 3.5 days.

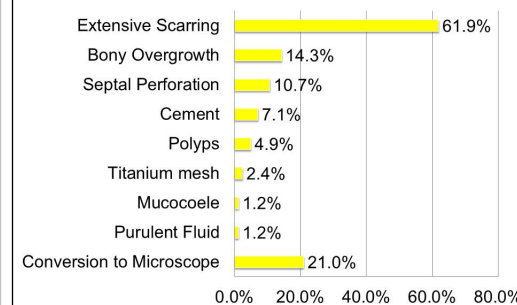
Operative Times:

- Primary operative group: 201 +/- 51 min
- Reoperative group: 221 +/- 61 min

Comparison of Pituitary Lesions



Intraoperative Findings



Results

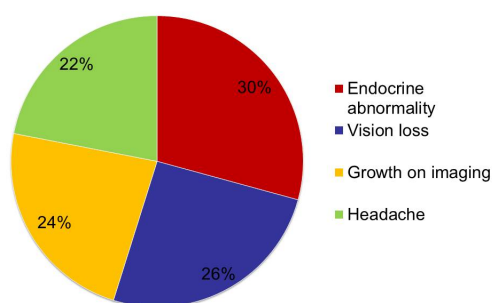
Gross total resection was achieved in 60.5% of reoperative patients.
20 Patients with pre-operative visual loss:

- 40% with post-operative visual improvement
- 55% with post-operative unchanged vision
- 5% with post-operative decreased vision

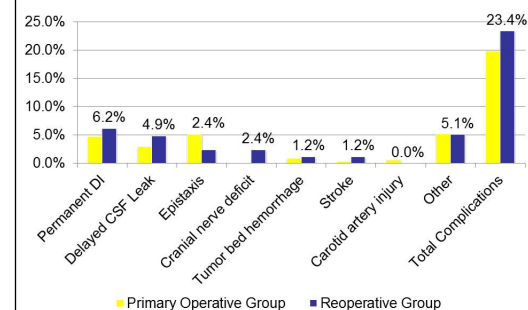
Hormonally active tumor remission was achieved:

- Cushing's Disease: 83% (11 of 13 patients)
- Acromegaly: 60% (6 of 10 patients)

Primary Indications for Reoperation



Comparable Complications



Conclusions

The endoscopic endonasal approach is a safe and efficacious approach for recurrent pituitary lesions. Difficult/distorted anatomy may provoke use of the microscope in the approach. Gross total resection and endocrine remission can be achieved in a majority of patients despite recurrent disease.

References

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