Rathke Cleft Cyst Surgery: Indications and Results Comparing Endoscopic With Sublabial Transsphenoidal Approaches

Catherine Buell; Joseph C Watson MD
George Washington University
Department of Neurosurgery

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Introduction

Transsphenoidal endoscopy has gained popularity as a surgical treatment option in patients with pituitary adenomas. We studied patients operated with pituitary Rathke's cysts from 2010 to 2016 to determine whether an endoscopic surgical approach conferred an advantage when compared to a traditional, transsphenoidal technique.

Methods

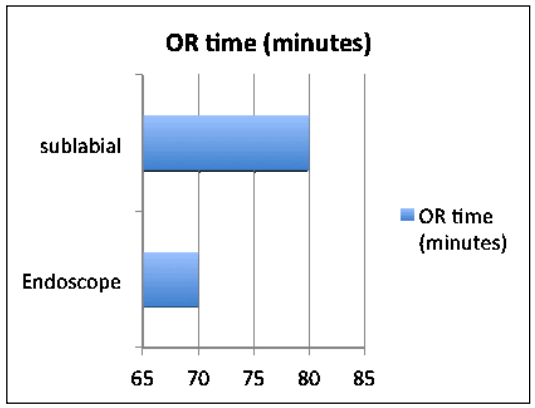
We analyzed data from our IRB approved, prospectively collected pituitary surgery database: this study compared Rathke's cleft cyst patients after endoscopic versus sublabial approach with respect to operating time, hospital length of stay, and complications such as diabetes insipidus, SIADH, or bleeding after surgery. The choice of surgical method was not based on patient pathology or neurosurgeon preference, thus minimizing bias.

Learning Objectives

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

1) critically compare endoscopic pituitary surgery to an open approach

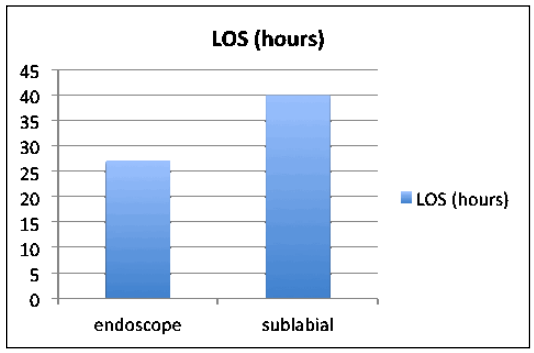
2) appreciate the indications and complications of surgery for Rathke's cysts



Results

This is comprised of 30 patients (16 females, 14 male, aged 16-69) who underwent surgery for treatment of Rathke's cleft cysts for indications most commonly related to visual disturbance and headaches. Of these, 57% used an endoscopic and 43% used a sublabial transsphenoidal approach.

No significant difference in operating time was noted (average values: 70 minutes for sublabial approach, 80 minutes for endoscopy.) Similarly, the length of stay in the hospital was also comparable (average values: 40 hours for sublabial approach, 27 hours for endoscopy). Of the 8 patients who experienced post-operative complications (1 DI, 4 CSF leaks, 2 SIADH and 1 nosebleed), six were endoscopic patients (P=not significant).



Conclusions

Both surgical methods present equally advantageous options for Rathke's cyst fenestration.

Selective use of each technique may vary based on clinician preference, previous training or current method of practice, however this study finds no evidence that endoscopy shows a favorable difference in patient outcome or provides a more cost effective solution than a traditional sublabial approach.

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