The nasoseptal flap is an axial flap based on the posterior septal branch of the sphenopalatine artery that courses from the maxillary artery and anastomoses with the anterior and posterior ethmoid arteries. The nasoseptal pedicled mucosal flap is a safe and effective alternative to skull base defects reconstruction, leading to a low incidence of postoperative CSF leak and related complications.

**INTRODUCTION**

The development of expanded endonasal approaches to the skull base has allowed purely transnasal treatment of many lesions that previously required a craniofacial approach. With the evolution of endoscopic technique, endonasal approaches have become a valid alternative to skull base defects reconstruction, leading to a low incidence of postoperative CSF leak and related complications.

**METHODS AND MATERIALS**

Data was gathered prospectively from all patients undergoing a totally endonasal endoscopic approach to skull base pathology and in whom a nasoseptal flap was performed. Data was collected over a 15-month period between January 2007 and January 2009. The majority of cases included all pituitary procedures, a transsphenoidal approach allowing binostril work to the sphenoid sinus. Otolaryngology - Head & Neck Surgery 2008;138(4):531-2. Publications and presentations at national and international conferences. Postoperative follow-up was performed in all patients.

**RESULTS**

Of the 100 patients, 86 were female with a mean age of 45 (range 18-82) years and mean follow up of 16 months (range 3-60). The nasoseptal pedicled flap was used in 86 patients in 58 cases of skull base pathology. One case of maxillary sinus disease, one of nasal septal perforation and one of nasal obstruction following surgery for a pituitary adenoma in a 41 year-old man and an 85 year-old man, respectively. Postoperative follow-up was performed in all patients.

**DISCUSSION**

The nasoseptal flap is a reliable method for repair of skull base defects resulting from expanded endonasal surgery. Postoperative CSF leaks when the nasoseptal flap is used are usually due to technical errors of the flap. Postoperative CSF leaks can also occur due to skull base defects, one of both of these factors may be present in all of the CSF leaks.

**REFERENCES**


