

Nasal Septal Surgery: ENTUK position paper 2010

Introduction

This document summarizes the current status of nasal septal surgery in terms of its indications, predicted results and patient reported benefits.

Indications for septal surgery

A blocked nose is the one of the commonest presenting chronic symptoms in Ear Nose and Throat practice. One of the commonest causes of a blocked nose is a deviation of the midline nasal partition known as the nasal septum¹. This deviation may be congenital or acquired as the result of facial injury. Since this is a structural problem the only definitive treatment is surgical correction, referred to as septal surgery or septoplasty.

Septal surgery is also performed to enable access for the treatment of tumours of the nose, sinuses or pituitary gland. Access may also be necessary to facilitate nasal polyp or lacrimal gland surgery, or to enable Continuous Positive Airway Pressure treatment to be used for sleep apnoea².

What is septal surgery

Surgery of the nasal septum, referred to as 'septoplasty', 'submucosal resection of the septum' or 'septal surgery', aims to remove or straighten part(s) of the deviated cartilage and bone of the nasal septum. The anatomy of the septum is complex and the site of the deviation will determine how complex and successful the surgery is. This surgery is performed overwhelmingly as day surgery under general anaesthesia.

Complications are uncommon, but include post operative bleeding or infection and occasional septal perforation and external nasal deformity

UK Septal surgery trends

In 2008 – 09, Hospital Episode Statistics (HES; www.hesonline.nhs.uk) identify just under 20,000 septal straightening procedures - 18, 813 septoplasty (E03.6), 989 submucosal resections (E03.1), with 87% of patients being under 60 years of age. These figures represent a 20% drop in total septal surgery since 1999 – 2000, probably due to improved case selection as a result of the now near-universal use of the rigid nasal telescope to facilitate the accurate diagnosis of nasal symptoms in the Ear Nose and Throat outpatient clinic.

Outcomes of surgery

Due to the dual chamber design of the nose, objective measures of nasal airway patency correlate only partially with patient sensation of nasal obstruction. As septoplasty aims to improve nasal symptoms, patient reported outcome measures are the optimum method of evaluating the results of surgery.

The marked improvement often reported by patients is not always reflected in objective measures of nasal obstruction. This reflects the limitations of the objective tools, but has led to conflicting evidence for the efficacy of nasal septal surgery. This is sometimes mis-interpreted by people outside of the specialty and has created a common misunderstanding that septal surgery is of limited effect, but this is far from the truth.

Many authors have published patient reported outcome data following septoplasty, with consistently good results. There are clinically significant and well maintained improvements in nasal obstruction symptom scores^{1,4,5,6}. In the USA, the American Academy of Otolaryngology's NOSE (Nasal Obstruction Septoplasty Effectiveness) study concluded that septoplasty results in significant improvement in disease-specific quality of life, high patient satisfaction, and decreased medication use¹. Using the Nasal Health Survey questionnaire, authors have reported a clinically significant improvement in 71% of patients ($P < 0.05$)⁷. Similar findings were reported by Buckland et al, when using the Sino-Nasal Outcome Test questionnaire in post septoplasty patients⁶.

The most recent, prospective study examining the outcome of septal surgery found a significant improvement in mean nasal obstruction symptom scores in 90% of **86** patients⁸. ENT surgeons are encouraged to collect additional objective data to confirm earlier reports⁹ of documented benefit using sensitive analysis of nasal flow (rhinomanometry) or the companion objective technique (acoustic rhinometry).

Many of the studies in the past have been retrospective or used general quality of life questionnaires. However, prospective randomized studies using tools validated specifically for nasal obstruction corroborate the findings of these earlier studies. Long term results (up to 3 years post operatively) following nasal septal surgery show a significant improvement in nasal symptom scores³.

Conclusions

- Deviation of the nasal septal remains a common and important cause of nasal obstruction.
- Nasal endoscopy identifies other intranasal disease and has greatly enhanced the selection of patients who are listed for septoplasty.
- The evidence consistently supports the view that nasal septal surgery is highly effective in improving symptoms of nasal obstruction.
- Septoplasty is not only a very effective day case operation, but also one with a low complication rate.

ENT UK is alarmed on behalf of our patients that PCTs should suggest that this successful, permanent and cost effective operation should be abolished or severely rationed in an arbitrary and indiscriminate manner. There is no evidence whatsoever to suggest that it is either ineffective nor used inappropriately in UK clinical practice.

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