

Patient satisfaction with day-case septoplasty and septorhinoplasty

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53 patients who underwent day case septoplasty and septorhinoplasty were followed up by questionnaire. 34 replies were received (64%). The average patient satisfaction was 70% but several problems were identified. Recommendations to improve the patients experience are made.

Introduction

The figure for all surgical operations performed as a day case at Guy's Hospital, London was 54.9% for 2002/2003. An audit on ENT day surgery was carried about by the Royal College of Surgeons (Eng.) Comparative Audit service, this found that nationally 31% of ENT procedures are undertaken on a day case basis. This compares to 14.6% at Guy's Hospital for 2002/2003 where 28.2% of septoplasties and 22.5% of septorhinoplasties are performed as a day case

Recent studies have shown that day case nasal septal surgery can be performed with good patient satisfaction, satisfactory quality, good safety and low complication rates providing careful patient selection is undertaken^{1,2}.

In this growing era of cost containment and quality assurance, clinicians should take patients' preferences into consideration when developing guidelines and clinical priorities. We therefore decided to undertake a retrospective questionnaire-based study into patient satisfaction with day case septoplasty and septorhinoplasty. Satisfaction is an important outcome measure. It may be a predictor of whether patients follow their recommended treatments, adhere to post-op regimens, re-attend for treatment or change their provider of health care³⁻⁵. There is also evidence that patient satisfaction may be related to improvements in health status^{6,7}.

The aims of the study were as follows:

- 1 To determine the level of patient satisfaction with day case septoplasty and septorhinoplasty.
- 2 To make recommendations to increase the level of patient satisfaction among septoplasty and septorhinoplasty patients.

Method

A questionnaire was sent to 53 patients who had undergone either septoplasty (32 patients) or septorhinoplasty (19 patients) at the day-case unit at Guy's Hospital London between January 2002 and March 2003 (36 males and 17 females). Patients were given a three-week period to respond non-responders received by a telephone call and a repeat questionnaire. A total of 34 out of 53 patients responded (64%; 21 males and 13 females, mean age 34, SD 11.7).

Patient's who required supplementary or additional surgery were excluded from the study (e.g. trimming of inferior turbinates or functional endoscopic sinus surgery). A Consultant ENT Surgeon, an Associate Specialist or a Specialist Registrar undertook Septoplasty operations, all Septorhinoplasty operations were undertaken by a Consultant ENT Surgeon.

Noses were prepared with Moffet's Solution at induction and patients breathed spontaneously on laryngeal masks. Hypotensive anaesthetic techniques were not employed. Patients were given "day case discharge advice leaflets" following surgery.

The Questionnaire

We questioned whether the patient would have preferred an overnight stay, a next day medical check-up and if so, a hospital check-up, a GP check-up or a phone call. They were also asked about the severity of their post-operative pain (as a visual analogue scale), its duration and whether analgesia was adequate. Bleeding severity, nausea, vomiting, disorientation and sore throat were also assessed. Sense of smell was not questioned on the basis of previous evidence⁸. Patients were asked if they needed readmission, unplanned follow-up and their overall satisfaction with the procedure (visual analogue scale). Finally the opportunity was given to express further thoughts and concerns.

Table 1 Questionnaire results.

Question Asked	Septoplasty	Septorhinoplasty
Would you have preferred an overnight stay?	27.8%	12.5%
Would you have liked a next day medical check-up (phone call or next day hospital check-up or GP)?	38.9%	56.3%
What was the severity of the post-operative pain? (visual analogue scale where 0 = no pain and 100 = most severe pain)	51	30*
How many days did the pain last?	50% reported 5+ days	38% reported 5+ days
Was your pain relief adequate?	64.7%	73.3%
What was the severity of post-op bleeding? (mean of 0–10 scale)	6.0	6.6
What was the severity of post-op nausea and vomiting? (mean of 0–10 scale)	2.4	0.5
What was the severity of post-op disorientation? (mean of 0–10 scale)	2.6	2.4
What was the severity of post-op sore throat? (mean of 0–10 scale)	2.9	5.1
How many days did the sore throat last?	5.6% reported 5+ days	25% reported 5+ days
Did you need to be readmitted after surgery?	11.1% (due to bleeding)	0%
Did you require further medical care?	22.2% (bleeding and infection)	12.5% (infection)
What was your overall satisfaction with the treatment?	70%	70.5%

(* significant at $P < 0.01$)

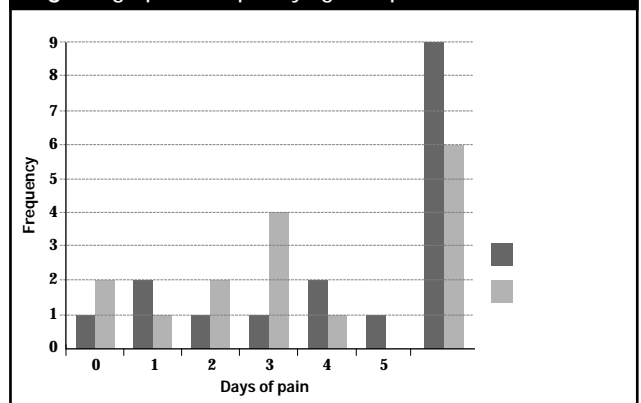
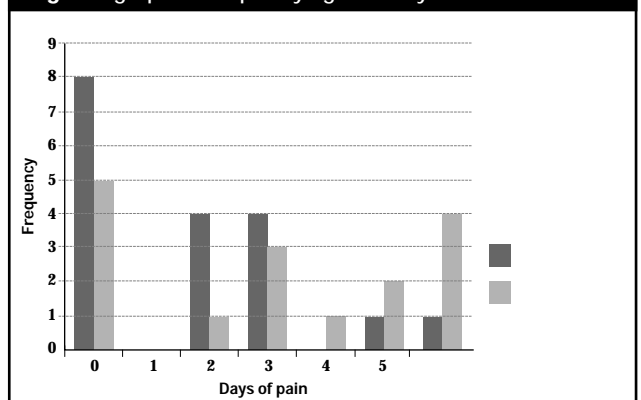
Results

34 out of 53 (64%) questionnaires were returned. 13 females and 21 males responded with a mean age of 34 (age range 17–78, standard deviation 11.7).

Table 1 contrasts the results for septoplasty and septorhinoplasty. Figure 1 demonstrates the frequency against pain duration. Figure 2 shows the number of days for which patients had a sore throat.

Additional comments for septoplasty included two complaining that the operation was unsuccessful, five mentioned lack of post operative information due to poor staff training or lack of an information sheet, three spoke of disorganised/chaotic hospital organisation, two had persistent discomfort post operation. Seven made no comments.

For septorhinoplasty; one patient felt too drowsy to understand the surgeons comments post-op. one patient complained of bad pre operative organisation, one was unhappy not to see the surgeon after the procedure and one patient (who needed to be re-admitted) was unhappy with the care on the ward. Twelve did not comment.

Fig 1 A graph of frequency against pain duration.**Fig 2** A graph of frequency against days of sore throat.

Discussion

The response rate from our questionnaires was 64%, similar studies have achieved rates of between 62% and 93%⁹⁻¹¹. The response rate for septoplasty was 56%, and for septorhinoplasty was 84%. The poor response rate for the septoplasty group may represent a source of bias.

We found that 27.8% of septoplasty patients would have preferred inpatient care compared to 12.5% for septorhinoplasty. Hogg *et al* found that 17% of patients undergoing day case septoplasty would rather have stayed overnight and thus concluded that day case septoplasty was acceptable.¹¹ Although our figure for septoplasty is higher, we still feel that day case septoplasty is acceptable since 72.2% of patients did not want an overnight stay. The figure is even more conclusive for day case septorhinoplasty as only 12.5% wanted an overnight stay. These differences may reflect a variance in surgical experience, septorhinoplasties where exclusively performed by a single consultant.

38.9% of septoplasty patients wanted a next day check up compared to 56.3% of septorhinoplasty patients. It is interesting that while more of our septorhinoplasty patients were happy to be managed as a day case this group preferred closer follow-up.

The favoured follow up method in the septoplasty group was equal between a phone call and a hospital check up whereas the septorhinoplasty group preferred a next day hospital check up (66%). It was revealing that only 1 person in the whole study wanted a next day check-up with their GP, this may be due to patient perceptions about being under specialist care.

The pain severity reported by the septoplasty group appears to have been significantly less than those undergoing septorhinoplasty. However there was no statistically significant correlation between severity of pain and satisfaction. In the septoplasty group 17% called the pain "most severe" while 11% said there was "no pain", while the figures for the septorhinoplasty group were 0% and 13%. These results are comparable to other studies.¹² It is intriguing that in septoplasty patients the severity and duration of pain was worse. This link between the severity and duration of pain is as one would expect although why septoplasty has a greater index of severity and duration of pain is unclear considering that septorhinoplasty is the more invasive and traumatic operation. Again, this may relate to the differences in the experience of the surgeons performing these procedures.

The bleeding severity of the septorhinoplasty group was 6.6 (out of 10), which compared to 6.0 for septoplasty. This may be because septorhinoplasty involves more intranasal trauma. Bleeding was the most severe symptom reported. The value for the severity of nausea and vomiting in septorhinoplasty patients was almost insignificant at 0.5 out 10, while the value for the septoplasty is slightly higher at 2.4. It is unclear why there is a difference in these two results, however both values are low showing that nausea and vomiting are not serious consequences.

The severity of disorientation was not reported to be significant with a score of 2.6 (out of 10) for septoplasty and 2.4 for septorhinoplasty.

Sore throat severity value for septorhinoplasty was 5.1 and 2.9 for septoplasty, which may link to the duration of the procedure. For days of sore throat, it was significant that 44% of septoplasty and 31% of septorhinoplasty patients experienced no discomfort, whilst 11% and 25% respectively reported discomfort for more than 5 days.

Bleeding was the only reason for patients to be readmitted. We found that 11% of the septoplasty patients needed to be readmitted compared with 0% for septorhinoplasty patients. The figure for septoplasty is similar to that obtained by Ganesan *et al* in 2000¹³, who found that 13.4% of all day case septoplasty patients needed to be readmitted overnight. ENT surgery in general has a 2.8% admission rate and our result together with Ganesan's study suggest that septoplasty patients may have a higher rate of readmission.

We found that in the septoplasty group 22% required further community medical care pre-follow up (11% for post-op infection and 11% for persistent bleeding). From the septorhinoplasty group 12.5% required further care and all these were due to postoperative infections. Bain *et al* 1999 (10), showed that in all day case surgery, 23% had medical problems after discharge, although it is not stated whether or not they all sought medical opinions. Six of our cohort felt it was important to provide future patients with adequate verbal and written information prior to discharge.

The average satisfaction rate for both operations was 70%. This compares less favourably with other groups who found that satisfaction with day case septoplasty was 83%¹¹. However, the difference could relate to methodology as Hogg *et al* used a binary 'tick-box' method to assess satisfaction compared to our visual analogue scale. However, it must be remembered that satisfaction scores are difficult to interpret when considering such procedures. It is often found in questionnaires that there is a reluctance to express criticism about NHS treatment^{6, 14}, even when the intervention is not technically successful^{15, 16}. In addition, with the careful selection policy used in day case surgery, it would be surprising if the large majority of patients did not have satisfactory outcomes. Most surveys show that only a few patients express negative views about their care, with at least 80% of respondents usually expressing satisfaction for any given question¹⁵.

There are a number of limitations of questionnaire-based studies. Including answers being ill-considered or whimsical and misjudgements arising from patients reliance on perceptions based on surrogate indicators 'halo effect' – e.g. basing ones perceptions on the extent of the doctor's friendly and reassuring interpersonal manners¹⁷. The retrospective nature of our study may also have led to recall bias and the omission of minor complications.

Conclusion

We found the vast majority of patients were satisfied with day case septoplasty and septorhinoplasty. A significant number wanted a next day check-up with popular methods being a hospital check-up or a phone call. Pain was identified as an issue particularly in the septoplasty group. The most severe complication was bleeding followed by sore throat. Readmission rate was 11% for septoplasty and 0% for septorhinoplasty while up to 22% required further medical care in the community for post-operative infection or bleeding. Overall, the average patient satisfaction was 70%, suggesting that day case septoplasty and septorhinoplasty are acceptable. We propose to do a follow-up study 6 months after the recommendations have been implemented.

Recommendations

- 1 With careful patient selection, day case septoplasty and septorhinoplasty services should be maintained and if feasible, increased.
- 2 The proportion of day case operations that take place in the morning, should be increased, allowing patients more time for recovery in hospital.
- 3 Bleeding was the sole reason for readmission and the control of bleeding should be made a clinical priority post-op.
- 4 Patients should be kept well informed and given more detailed information regarding their procedure and what to expect after the operation with regards to follow-up care (preferably as a patient information sheet).
- 5 Ensure that all patients are seen by their surgeon just prior to discharge and given further information and reassurance.
- 6 Patients should be given the opportunity to request for a follow-up phone call a set time after the operation.

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