

Abstract

Objective: 1) Evaluate patient reported outcomes of nasal valve repair using a survey. 2) Understand quality of life measures following nasal valve reconstruction

Method: This retrospective study evaluated patients who underwent nasal valve reconstruction between December 2005 and December 2011. The study involved a 39-question survey that measured quality of life, overall satisfaction with the surgical outcomes, and patient-reported surgical outcomes in multiple symptoms including nasal obstruction, exercise, tolerance, sleep, etc.

Results: Forty-two patients completed the survey and 25 had prior nasal surgery. The most common postoperative complaint was breathing difficulties (36%). Seventeen patients (39%) reported no change in the size of the nose despite augmentation of the nasal valve. Of those patients who did notice a change, 52% stated they noticed the increase in size occasionally and never heard comments from others (70%). Overall, patients were satisfied with the results (81%), and 98% would recommend the procedure to others. There was a statistically significant improvement in nasal blockage/obstruction, and breathing through the nose during exercise.

Conclusion: Our data suggest that nasal valve reconstruction is a reasonable approach to patients with nasal obstruction and trouble breathing through the nose. This approach may be especially important in patients who have already had prior nasal surgery.

Introduction

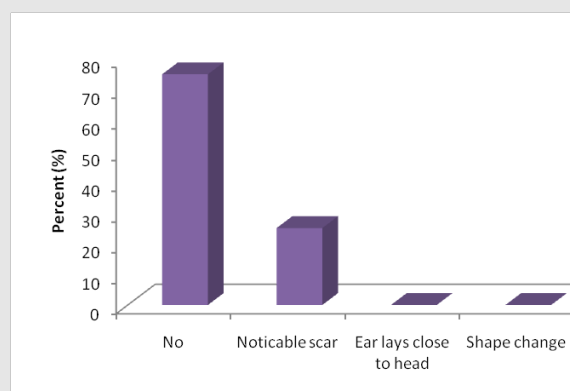
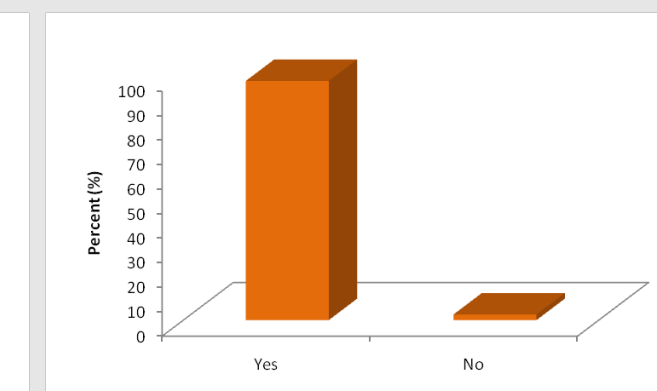
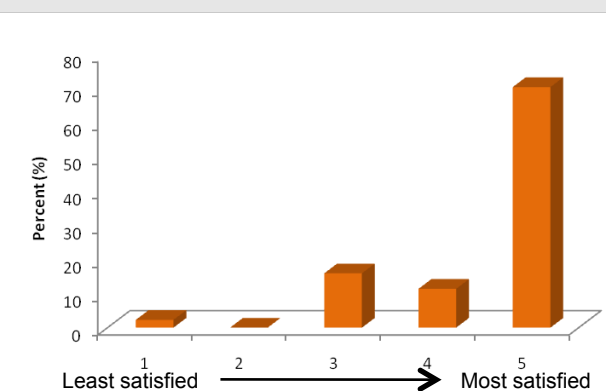
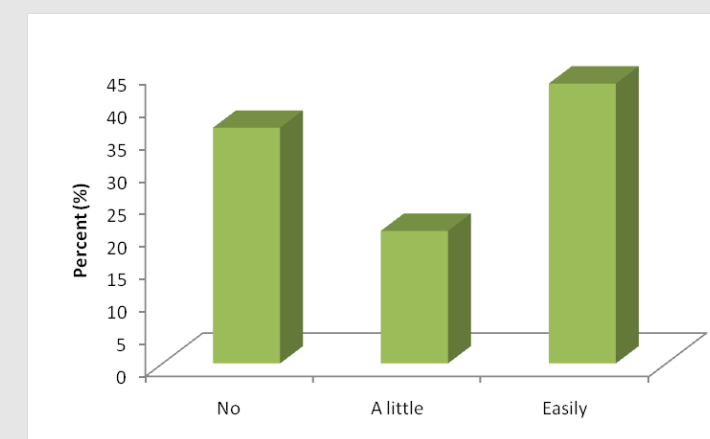
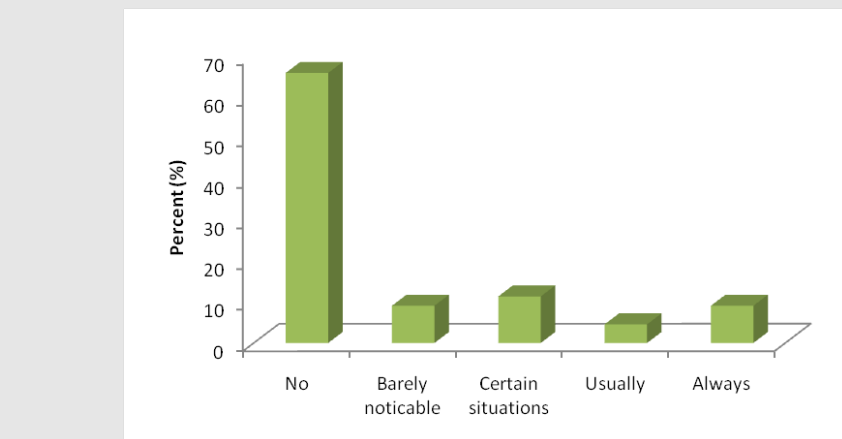
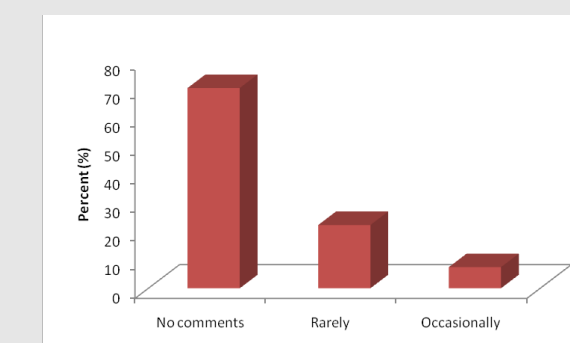
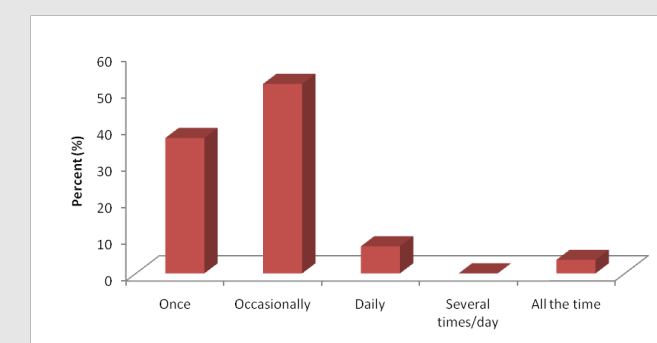
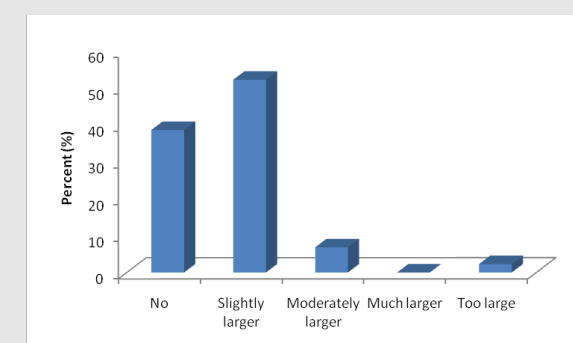
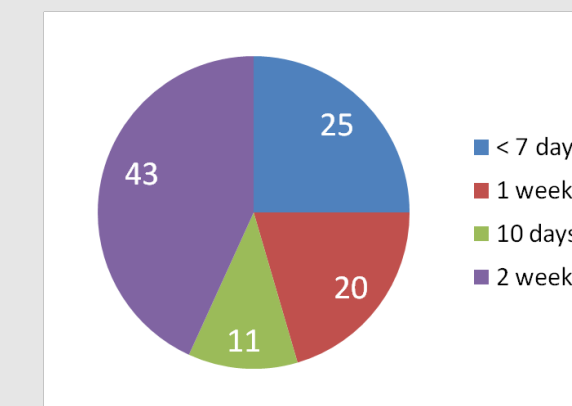
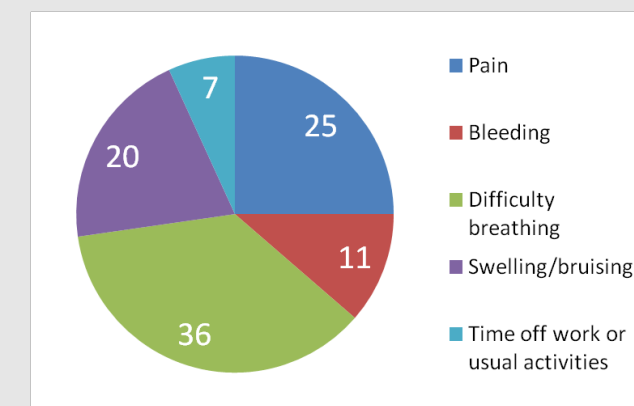
- Estimated 13% of the population has nasal valve collapse
- Often overlooked component of nasal obstruction
- Many different surgical options exist: spreader grafts, batten grafts, columellar struts, septoplasty, etc.
- No “gold standard” recognized because problem is complex
- Few patient reported outcome studies

Methods

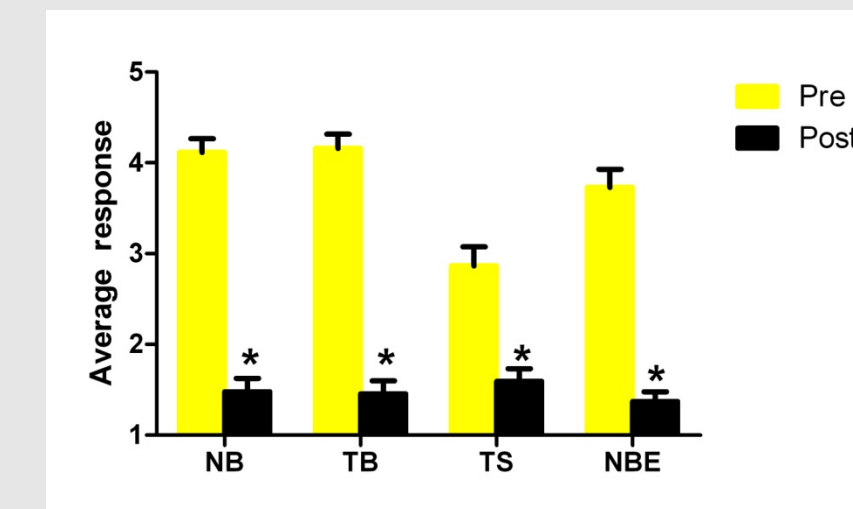
- Objective, retrospective study that focused on patient reported outcomes following septorhinoplasty or revision septorhinoplasty using grafts/implants
- Telephone questionnaire of 37 questions: quality of life measures pre- and postoperatively

Results

- 44 patients completed survey: 57% revisions
- Surgery dates (12/2005 to 9/2011)
- Spreader grafts (57%); Batten grafts (7%); Columellar strut (66%); Nasal implants (34%); Septoplasty (89%); Turbinate reduction (50%)



- 100% of patients reported no pain at ear cartilage donor site (N=8)
- 100% of patients received no comments from others about their ear cartilage donor site (N=8)



Nasal symptoms pre- and post-operatively. NB = Nasal blockage or obstruction; TB = Trouble breathing through the nose; TS = Trouble sleeping; NBE = Difficulty breathing through the nose during exercise. Average \pm SEM, *p < 0.0001

- Statistically significant improvement: need to blow the nose, sneezing, runny nose, post nasal discharge, thick nasal discharge, facial pain/pressure, difficulty breathing through the nose, decreased sense of smell, difficulty falling asleep, waking at night, lack of a good nights sleep, waking up tired, fatigue, reduced productivity, feeling frustrated/restless/irritable
- No significant change: dizziness, ear pain, reduced concentration, sadness, embarrassment, asthma

Conclusions

- Patients are highly satisfied with NVR
- 57% revision septorhinoplasty
- Although patients report their nose is larger (61%), still recommend procedure to others (98%)
- Worst part of recovery: trouble breathing through nose
- Most patients recommend 2 weeks for recovery
- Ear cartilage donor sight with no morbidity
- All nasal symptoms showed a statistically significant improvement pre- to postoperatively
- Consider NVR in patients with obstructive nasal symptoms with prior septoplasty

References

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