**Objective Outcomes after Endonasal Spreader Graft Placement for Internal Nasal Valve Collapse**

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**INTRODUCTION**

Internal nasal valve (INV) collapse is a relatively common cause of nasal obstruction encountered by Otolaryngology-Head and Neck surgeons. Endonasal spreader graft placement is one method to improve the cross-sectional area and decrease dynamic collapse at the internal nasal valve area. Thus far, no objective evidence exists in the literature for the effectiveness of this technique. Thus the objective of this study is to provide objective evidence of nasal obstruction relief after spreader graft placement.

**METHODS**

**Inclusion Criteria:**
- Adult patients
- Clinical evidence of internal nasal valve collapse
- Consented for septoplasty with endonasal valve placement (study group) and septoplasty alone (control group)

**Exclusion Criteria:**
- Patients undergoing:
  - Revision septoplasty
  - Setorhinoplasty
  - Revision setorhinoplasty
  - Other nasal graft placement
  - Concomitant other cause of nasal obstruction

**Prospective cohort study**
- Tertiary Rhinology and Facial Plastic Surgery practices
- Health Ethics Review Board Approval obtained (Pro00041956)
- A priori sample size calculation with $\alpha = 0.05$ and $\beta = 0.80$ to detect 20% change in cross-sectional area, requires 18 patients

**METHODS**

- **Primary Outcome:**
  - Change in cross-sectional area (mm²) at internal nasal valve measured pre- and post-decongestion at pre-op and 3 months post-operatively

- **Secondary Outcome:**
  - SNOT-22 and NOSE scores measured pre-op and 3-months post-operatively

**RESULTS**

- Active patient recruitment is on going
- Required a priori sample size has not been reached to make firm conclusions from preliminary results

**DISCUSSION**

- Endonasal spreader graft placement is a commonly performed technique for INV collapse
- This will be the first study to provide objective evidence of its potential effectiveness
- The study also attempts to correlate objective results with subjective symptom scores