## DISCUSSION

## Discussion: Extracorporeal Septoplasty: Assessing Functional Outcomes Using the Validated Nasal Obstruction Symptom Evaluation Score over a 3-Year Period

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reviewed this article by Drs. Mobley and Long with great interest. Both aesthetic and functional rhinoplasty, at times, share common goals. The authors retrospectively review 55 patients over a 3-year period who underwent extracorporeal septoplasty and were evaluated by the Nasal Obstruction Symptom Evaluation score preoperatively and postoperatively. The authors observed a significant decrease in the Nasal Obstruction Symptom Evaluation score in this group of patients.

I commend the authors for their efforts in using a validated evaluation scoring mechanism preoperatively and postoperatively for nasal obstruction which, as a purely subjective symptom, may be an elusive outcome measure. Nonetheless, the ability to conduct and to compose adequately controlled studies in the field of functional nasal procedures is a challenge.

The authors state that a "strict patient selection process was used." Although it appears that the worse-case, or "top-tier," caudal septal deflections were selected for inclusion in the study, one could posit that selection bias was present. Nonetheless, it is important to note that a consecutive series of these patients were studied. It would be also important to know the actual percentage of revision cases in this series. In addition, one can imagine that unsatisfied patients undergoing a second procedure would report more extreme preoperative Nasal Obstruction Symptom Evaluation scores.

The authors state that the median follow-up time was 2 months postoperatively. The follow-up time is relatively short, especially in a functional rhinoplasty series. The authors do not state specifically, but I am assuming that all 55 patients answered the postoperative Nasal Obstruction

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Symptom Evaluation completely, although the authors state that median follow-up time was 2 months and questionnaires were sent out between 3 and 6 months postoperatively. A subsequent Nasal Obstruction Symptom Evaluation with longer follow-up time may yield additional useful information.

Removing all the confounding variables and limitations when studying functional rhinoplasty remains a challenge. Similar to limitations in other studies, the patient population is heterogeneous; some patients had a previous procedure, and some did not. In addition, not every procedure performed was exactly the same. The authors do not even report how many patients exactly underwent a previous procedure. I think this is crucial information. Even with small subgroups, one could have attempted to make subpopulations and see whether a statistical difference existed in patients with and without a previous procedure. Ultimately, the sample size may be too small for subgroup analysis but only confirmed with power calculations. I agree with the authors' choice of the Wilcoxon signed rank test; however, a paired ttest would also suffice.

Certainly, an open approach to the septum for a purely functional procedure cannot be taken lightly. Counseling with the patient regarding a transcolumellar incision, increased length of surgery, and increased swelling are just a few of the considerations with this approach. Alternatively, there are many causes of persistent nasal obstruction both with and without prior surgery. If one is to undertake a maximum approach to septoplasty, as described here and previously with extracorporeal septoplasty, one obviously needs to be prepared to not only straighten the septum but also restore/reconstruct the nasal tip in a manner similar to its preoperative state or straighter. My own approach to

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