

### To the Editor:

Plaudits to Doctors Mucci and Sismanis for documenting the efficiency of partial resection of the inferior turbinate (PRIT) in correcting:

- nasal obstruction 92%
- sinus pressure headaches 83%
- (loud) snoring 81%
- obstructive sleep apnea 63%

It should be noted that the results for (loud) snoring are about the same as those for a variety of palatopharyngoplasty procedures (85%) - even though Doctors Mucci and Sismanis were operating primarily to correct long-term nasal obstruction. And, their results were higher (63% vs. 50%) than those seen in many uvulopalatopharyngoplasty series done exclusively for obstructive sleep apnea. This is particularly so if no meaningful corrective intranasal airway surgery was done to complement the uvulopalatopharyngoplasty.

During sleep, the nasal airway is the preferred route of respiration. Conversely, in the awake patient, the oral route provides about 50% of the airway. During sleep, pharyngeal muscle tone is decreased and, thus, inspiratory pressure must increase to counteract this "flaccid" condition. When the patient with a marginal nasal airway is recumbent, further engorgement of the inferior turbinates occurs. This produces nasal obstruction. And, so, during sleep, an even greater inspiratory effort is required to counteract the obstructed nasal airway. When nasal obstruction is coupled with flaccid, redundant pharyngeal abductor and dilator muscles, snoring, and then later, obstructive sleep apnea occurs.

It's been my experience that most patients who snore loudly, who have clinically significant obstructive sleep apnea, and who have EDS (excessive daytime somnolence), also have clinically significant nasal obstruction. If corrective inferior turbinate surgery is combined with the uvulopalatopharyngoplasty in this group of patients, the success rate for obstructive sleep apnea and excessive daytime somnolence should be around 85%, rather than the 50% achieved in many uvulopalatopharyngoplasty series alone.

Historically, it should be noted that in 1973, Hunter Fry took the courageous step, in the face of "conventional wisdom," and showed us once again how to partially reset offending inferior turbinates. One-third should be fine! Fry also showed how the chemical composition, the bacteriostatic activity, and the migratory pattern of the dynamic nasal mucous blanket was (favorably) changed after PRIT (partial resection of the inferior turbinates) in cases of longstanding nasal obstruction. And Courtiss presented two supporting series in 1978 and 1983. Courtiss often reminded us that otolaryngologists, in the pre-antibiotic era, would frequently amputate the entire lateral nasal wall. The inferior turbinate, middle turbinate, as well as the medial wall of the maxillary sinus, in cases where there was advanced, persistent suppuration (of the contents of the maxillary antrum and ethmoid air cell system) were

often resected, in pre-antibiotic era nasal surgery. Thus, the confusion about "turbinate surgery" and atrophic rhinitis. I've done PRIT in well over 1,000 patients now and have yet to see atrophic rhinitis as a long-term (over six months) complication in any of these patients.

Finally, two technical points: The Heavy Knight scissor, as noted by Sheen, is far too strong for partial resection of the inferior turbinate) is resected, in some cases, when the Heavy Knight scissor is used. The Light Knight scissor is better. But the best is the #1 Gruenwald forcep. The Gruenwald forcep can be used to "manicure" the inferior turbinate to just the right size. The combination of Gruenwald trim and repeated infiltrations of the 1/2% Xylocaine®, with epinephrine 1:200,000, into the remaining portion of the inferior turbinate, provides for excellent, yet safe, hemostasis and provides the operator with an accurate idea of what that turbinate's size will be months and years later.

With regard to postoperative crusting, postoperative synechiae and postoperative nasal toilet: .020-inch soft Duralistic® silicone rubber sheeting (by ABT Corp., Silverdale, Washington) is placed on either side of the septum, and sutured in place, anteriorly, with a 3/0 black silk mattress suture. This prevents synechiae formation in almost all cases. And the silastic sheeting seems to actually reduce the amount of postoperative crusting. The use of the Grossan Nasal Irrigation tip, the WaterPik®, and warm salt water provides significant relief from crusting in most postoperative patients. Three weeks later, the silastic sheeting is removed. Healing should be nearly complete. This technique will often reduce the "nasal toilet" required in the office by about two sessions.

Again, congratulations to Doctors Mucci and Sismanis for showing us that partial resection of the inferior turbinate is, in fact, superior to electrofulguration in accurately reducing the size of offending inferior turbinates. Furthermore, their finding that snoring, and especially obstructive sleep apnea, are both improved in many patients following partial resection of the inferior turbinate is of tremendous clinical importance and should be investigated further.

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