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Editorial

Middle turbinate resection in FESS: Do or do not?

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Whether to resect the middle turbinate during functional endoscopic sinus surgery (FESS) is a debatable issue with nose surgeons worldwide. In the initial years of performing functional endoscopic sinus surgery, I used to resect the middle turbinate (MT) liberally, to gain access into the middle meatus intra- operatively, for the ease of middle meatal antrostomy and to have a good postoperative view of the ethmoid gallery, besides improved topical drug delivery.

Many surgeons still reason that not resecting the MT is associated with the risk of synechiae formation, causing lateralization of the middle turbinate postoperatively with blockage of sinus ostia.[1] Others believe that there is less risk of synechiae development and less requirement of revision surgery in the patients with MT resection in comparison to the patients where MT is preserved.[2] But with the availability of better instrumentation, like microdebrider, there is maximal preservation of normal mucosa, thus limiting the raw area and granulations. Besides, meticulous dissection helps in avoiding synechiae formation.

Authors have shown that the comparative quality of life, with resection or preservation of MT, is quite similar.[3] The comparative study on nasal airflow resistance at 3 and 12-month follow-ups in patients with either MT resection or MT preservation, was not significantly different.[4]

This data cannot undermine the importance of MT as an important landmark for Rhinologists. Its presence helps in the easy identification of various sinus ostia, skull base, medial orbital wall and lacrimal sac in revision or subsequent nose surgery. Besides its anatomical use, it helps in maintaining the air currents flow inside the nasal cavity, humidification, ventilation of the sinuses and olfaction.[5] Removing the middle turbinate excessively may lead to atrophic rhinitis and frontal recess stenosis.[6]

In more than two decades of my practice, the MT has gained more respect, and all efforts are made to preserve it maximally in patients with chronic rhinosinusitis. Resection is now restricted to most anterior-inferior portions (partial), that too in selected cases of extensive disease, or poor stability of MT, as seen in patients with chronic rhinosinusitis with polyps and paradoxical turn in MT. Resecting only the anterior-inferior part preserves the superior and posterior parts, thus avoiding damage to the olfactory mucosa and bleeding from the sphenopalatine artery respectively.[7] Also, in cases with concha bullosa, lateral laminectomy is done.

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