

## **Summary**

Nasal obstruction is a very common complaint, which may be caused by various causes. But one of the most important causes is septal deviation.

Many techniques have been described to correct these septal deviations since the middle of nineteenth century. There have been several modifications since its inception, starting from radical septal resection to mucosal preservation and subsequent preservation of the possible septal framework.

The application of endoscopic techniques to correct septal deformities was initially described by both Lanza et al. and Stammberger in 1991.

Since that time, many authors began to use an endoscope in correction of septal deviations.

The aim of our study was to evaluate efficacy of endoscopic septoplasty to traditional septoplasty in treating cases having septal deviations. In our study, 40 cases complaining mainly of nasal obstruction due to significant septal deviations were selected. They were divided into two groups.

Group A: 20 patients underwent endoscopic septoplasty.

Group B: 20 patients underwent traditional septoplasty.

Each group was subdivided into two equal subgroups, one of them septal splints were applied, and the other with no splints.

Each patient was subjected to a pre-operative protocol that included a thorough history taking, general and local examination, nasal endoscopic examination and active anterior rhinomanometry.

Postoperatively, all patients were viewed in the outpatient clinic. Once weekly for the 1<sup>st</sup> month then every 2 weeks for 3 months then once every month till the end of follow up period after 6 months. They were subjected to an assessment protocol similar to the preoperative one.

In our study, we didn't find any significant difference in the preoperative results between both groups as regards age, sex, duration, side of nasal obstruction, number of patients having associated symptoms, types of septal deformities and the preoperative values of the means of the subjective and objective assessment of nasal obstruction. So, the preoperative circumstances were similar between both groups; consequently any expected difference in the postoperative results would depend mainly on the surgical technique used in each group.

Results of our study showed that the two procedures were suitable to correct septal deformities. But endoscopic septoplasty was superior to traditional septoplasty in :

- Treating nasal obstruction, as the mean postoperative total nasal resistance was 0.1837 in group A and 0.2279 in group B with high significant difference between two groups.
- In cases of isolated septal spur, as we make incision on the spur itself. So less time consuming during operation and less morbidity.
- Also, it is superior in preventing occurrence of persistent posterior deviations and spurs. By endoscopic examination on last available follow up, no persistent spurs but 6.67% persistent posterior deviations were found in group A. in group B, 26.67% persistent spurs and 40% persistent posterior deviations were found.
- By endoscopic septoplasty, we minimize persistent contact between the nasal septum and turbinates.