



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1470001>Available online at: <http://www.iajps.com>

Research Article

**STUDY TO KNOW THE POSTOPERATIVE OUTCOME  
COMPARISON OF CONVENTIONAL VERSUS ENDOSCOPIC  
SEPTOPLASTY****Dr. Amina Iqbal, Dr. Hamd Zahra, Dr. Mahpara Asif**  
King Edward Medical University**Abstract:**

**Objective:** To compare the postoperative results of a deviated nasal septum corrected by endoscopic and conventional septoplasty.

**Study design:** A prospective study in 110 patients.

**Place and Duration:** In the Otorhinolaryngology (ENT) Department, Services Hospital, Lahore for one year duration from December 2016 to December 2017.

**Methods:** This study was performed in 110 cases (deviation nasal septum) who admitted to the ENT department. After random sampling, we divided them into two groups, treated group A group consisting of 55 patients who underwent endoscopic septoplasty and 55 patients treated group B with conventional septoplasty.

**Results:** Nasal obstruction (95.5%), headache (59.1%) and posterior nasal drip (40%) were observed in patients with endoscopic septoplasty.

**Conclusion:** Endoscopic septoplasty, posterior deviations were corrected and resulted in fewer postoperative complications than conventional septoplasty.

**Key words:** deviated nasal septum, endoscopic septoplasty, conventional septoplasty, posterior deviation in nasal septum

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Please cite this article in press Amina Iqbal et al., *Study to Know the Postoperative Outcome Comparison of Conventional Versus Endoscopic Septoplasty.*, Indo Am. J. P. Sci, 2018; 05(10).

**INTRODUCTION:**

The deviated nasal septum has advanced the removal of the septum cartilage radical, which is the minimal cartilage excision known as surgical septoplasty. Nowadays, the concept of tissue protection provides adequate support for the nose and also prevents scars. The endoscopic approach for correction of the deviated nasal cavity is an excellent method for detecting nasal congestion and correlation intensity with the deviated septum, the outer wall of the nose. In the field of rhinology, endoscopic surgery has changed the application of functional endoscopic beyond sinus surgery (ESC) and is now one of the most common procedures of septoplasty. Septoplasty with excellent images with a nasal endoscope is minimally invasive and less traumatic to the nasal mucosa and the environment. The traditional method to correct the deviated septum mainly produces a residual deformity of the rear wall sling, but the iatrogenic deformation damage to the nasal airway, but increases the Osteomeatal complex and poor visualization and limited accessibility. Nasal endoscopy provides definite preoperative identification of pathology with lateral septal abnormalities of the nasal wall that provides great help in planning the endoscope. Currently, a correction of endoscopic septoplasty is an excellent tool for studying nose sling concept very quickly and quickly and also postoperative and late postoperative septoplasty.

**MATERIALS AND METHODS:**

This prospective study in 110 patients was held in the Otorhinolaryngology(ENT) Department, Services Hospital, Lahore for one year duration from

December 2016 to December 2017. One hundred ten (110) patients who were included in this study were randomized because of deviated nasal septum. These patients were divided into two groups: 55 patients and group B and 55 patients. Group A was treated with endoscopic septoplasty and group B was treated with conventional septoplasty. All patients presenting with nasal congestion, nasal obstruction, nosebleed, swollen rectum, nasal septum and headache were included in this study. Endoscopic septoplasty procedure was performed under general anesthesia and in some cases. 1: Injection of 2% xylocaine with adrenaline at 200,000. Dilution, especially with the aid of the rigid endoscope (Of), emits both sides of the deviated septum. 55 patients in group A with an incision with deviated septum flow or inferior spur 0 ° or in isolated cases endoscopy. If the elevator mucoperichondrial wing contrasts to the mucous membrane of the mucosa, hit a few millimeters after interrupting the mucosa of the divide, resulting in a total level of deviation of the septum deviation obtained by direct absorption by absorption under a surgical view made using the endoscope 0 to balance the cartilage. The excision of the septum was performed with endoscopic scissors. Mucoperichondrial flaps were repositioned after the suction opening, in most cases only one or no suture was required. The nasal cavity was filled with a cotton-covered polifax ointment, which was coated after 10-12 hours.

**RESULTS:**

In our study, all patients belonged to the gender as well as mostly to the second and third years. As shown in Table-1, the male-to-female ratio is 7: 3.

**Table 1:Age and gender distribution of the patients**

Gender	10 - 20 years	21 - 30 years	31 - 40 years	41 - 50 years	Total
Male	22	36	13	06	77
Female	14	13	04	02	33
Total	36	49	17	08	110

110 patients had clinical findings: nasal obstruction (90%), runny nose (20%), headache (40%), runny nose (11.8%), hyposmia (6.4% in this study), nosebleed (2.73%), snoring (4.5%). (Table 2).

**Table 2: Clinical Presentations**

Symptoms	No. of patients	percentage
Nasal Obstruction	99	90 %
Nasal discharge	22	20%
Headache	44	40 %
Postnasal drip	13	11.8 %
Hyposmia	7	6.4 %
Nose bleeding	3	2.73 %
Snoring	5	4.5 %

In the postoperative follow-up of our 110 patients, it was found that 95.5% of group A and 63.6% of group B were released from nasal obstruction and had no headache at 59 years of age. The group did not have a nasal discharge of 1% and 50% in group B, 20% in group A and 10%. It was 0% (Table 3) in patients with group B whose hyposmia was attenuated. ).

**Table 3: Postoperative assessment of clinical symptoms relieved by both the methods**

Symptoms relieved	Group A (n= 55)		Group B (n=55)	
	Endoscopic septoplasty		Conventional septoplasty	
	No. of Patients	%	No. of Patients	%
Nasal obstruction	105	95.5 %	70	63.6%
Headach	65	59.1%	55	50 %
Postnasal drip	44	40 %	22	20 %
Hyposmia	11	10 %	00	0 %

In follow-up, a permanent deviation was observed in 0% of patients in Group A, while a residual deviation was observed in 2.73% of group A and 20.9% of group B patients. 10% and 6.4% respectively (Table -4).

Table 4: Pos-operative Complications

Complications	Group A (n=55)		Group B (n=55)	
	Endoscopic septoplasty	Conventional septoplasty	No. of Patients	%
Residual posterior deviation	03	2.73%	23	20.9%
Spur	00	0%	11	10%
Synechia	00	0%	07	6.4%

**DISCUSSION:**

In the past, different types of deviations of the nasal septum have been corrected by various surgical techniques. In the twentieth century, the concept of resection (SMR) was popular, or Freer and Killian were submucoperichondrial. Sepsoplasty was performed as a more conservative method because of the frequency of complications in postoperative MRI operations. In 1963, Cottle gave the concept of traditional septoplasty. However, this technical septoplasty has also been completed with some postoperative complications such as iatrogenic trauma mucoperichondrial back cap and residual deformity. Therefore, the advent of the nasal endoscope is convincing minimal resection of the cartilage and the appropriate reorganization of the septum alternative and therefore restricted septoplasty facilitates the accurate identification of the septum to the height of the endoscopic septoplasty of mucoperichondriales wings. In our study, 110 patients were 77 men and 33 women, and the rate was 7: 3. Random sampling showed that most of these patients belonged to ten seconds of life. Nasal congestion (90%), runny nose (20%), headache (40%), nose (11.8%) were the most common symptoms. Similarly, similar complaints were observed in a related study. Traditional septoplasty was performed with illumination light with a nasal speculum, but poor visualization, especially behind the camera, may produce trauma to the mucosa and bleeding, producing a residual septum sling. Deviations in endoscopic septoplasty have many advantages over conventional septoplasty, which provides a better visualization of the posterior septum. During the procedure, the endoscope can pass under the blades with minimum mucosal wing height to obtain perfect images. Among the common complaints of our patients, nasal obstruction with

endoscopic technique was developed by traditional septoplasty with 50% endoscopic and endoscopic technique and only 62.6% with conventional septoplasty alleviated this endoscopy 59.1%. Retrospective search revealed nearly similar results in more than five studies

**CONCLUSION:**

Endoscopic septoplasty has a distinct advantage over conventional approach, which can accurately identify the pathology, accurately remove the deviated portion of the septum and better illuminate the cartilage to achieve better results. It also reduces morbidity due to limited dissection and manipulation of mucosal and septal cartilage. There are disadvantages such as endoscopic procedure, binocular vision loss, repeated cleaning of the endoscope and also severe septal deformities, or absence of an endoscope and broken septal deformities. However, endoscopic septoplasty offers an alternative to traditional techniques with superior visualization, excellent illumination and better results. It is also an excellent tool to teach when adding video monitors.

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