

## International Journal of Interdisciplinary and Multidisciplinary Research (IJIMR)

ISSN 2456-4567

### Septoplasty - Case Study

**Devi Shri G.S<sup>1</sup>, Akila.V<sup>1</sup>**

<sup>1</sup>Department Of Pharmacy Practice, Swamy Vivekanandha College Of Pharmacy, Tiruchengode, Namakkal, Tamilnadu, India

#### **Abstract:**

When the thin wall of nasal septum between the nasal passages is displaced to one side, then it is said to be a deviated septum. In the case study, we discussed about a 31-year-old male patient who had symptoms of nasal obstruction and dyspnea for 20 days. A CT scan showed deviated nasal septum and had undergone septoplasty surgery.

**Keywords:** 1. Anterior Deviation 2. Deviated Nasal Septum 3. Nasal Obstruction 4. Septoplasty

#### **Introduction**

Nasal septum is placed in a central portion of the nasal cavity, made up of bones and cartilage<sup>1</sup>. The bony portion is located posteriorly and is composed of a perpendicular plate of the ethmoid bone, vomer bone and maxillary crest. On the other hand, the cartilaginous part is located inferiorly which consists of collagenous fibres of quadrilateral cartilage or septal cartilage<sup>2</sup>. This septum separates the nasal cavity into two symmetrical halves of right and left nasal cavity regulating airflow to the nose<sup>1</sup>. When there is displacement or dislocation in the thin wall between the nasal passage resulting Nasal septum deviation. It may occur in anterior and posteriorly. Moreover, Anterior septal deviations affect the nasal airflow dynamics either directly or indirectly. Therefore, Posterior septal deviations are better tolerated, it affects the breathing only when the septum is severely deviated<sup>2,3</sup>. DNS is one of the major structural causes for nasal obstruction and contact headache which may result from traumatic injuries, iatrogenic causes, and may be associated with developmental deformation<sup>4,6</sup>. The most common signs and symptoms of this disorder include nasal blockage, breathing difficulty, rhinorrhea, anosmia, dryness in the nostril and nose bleeds<sup>5</sup>. Individuals associated with this deformity can be corrected by using Septoplasty. Septoplasty is the surgical procedure technique, which is most frequently used in otorhinolaryngology practice. By performing this procedure will help to straighten the bone and cartilage between two nostrils<sup>6,7</sup>.

#### **Case presentation:**

A 31-year-old male patient was admitted to the General medicine department with the complaints of difficulty in breathing and nasal obstruction for 20 days. On physical examination, the patient was found to be conscious, oriented and afebrile.

His vitals showed normal BP (120/70 mmHg), body temperature(98.6°F), SpO<sub>2</sub>(99%) and RR(20 breaths/min). His PR was slightly elevated (84beats/min) from normal.

His laboratory investigation showed increased level of MCH(35 pg), MCHC(37 gm/dl) and decreased level of RBC(4.21million/cumm).The patient performed a CT scan. His report showed Anteriorly deviated cartilaginous to the left. Finally, he was found to have Nasal septum Deviation and performed surgical management of Septoplasty. He was treated with the following drugs, Inj. ceftriaxone (1gm) was given by IV BD for prophylaxis, Inj. Pantoprazole (40mg) IV BD was given to

reduce the gastric acid secretion in the stomach, Inj.Paracetamol (1gm) IV BD was given to reduce the pain after surgery and Inj.Tranexamic acid (500mg) IV TDs was given to stop bleeding after surgery. Finally, the patient was managed by Antibiotics, Analgesic and Antifibrinolytics. Hence discharged from the hospital after 2 days. The Discharge medications were T.Amoxicillin and clavulanate 500mg , T.Pantoprazole 40mg BD, T.Zerodol SP (Aceclofenac 100mg + Serratiopeptidase (EC) 15mg + Paracetamol 325mg) , T.Montelukast + Levocetirizine 10mg + 5mg was given at bed time and orinase drop was given for 7 days.

#### **Discussion:**

The condition of a deviated nasal septum is quite prevalent. Because of the changed nasal cavity ventilation, it may result in persistent alterations in the nasal and sinus mucosa. Septoplasty is a surgery that is used to repair a deviated nasal septum which is similar to the study conducted by Mohammad Nizamuddin Khan<sup>8</sup>.

In the study conducted by Prayaga N. SrinivasMoorthy, the majority of septum deviation was seen on the left side, which is the same as in our study the patient had a left-hand deviation<sup>9</sup>.

In this study, the patient had a nasal obstruction which is similar to a study of VegardBugteni.e the nasal obstruction is defined as a patient's discomfort caused by a lack of airflow via the nose. Nasal obstruction is a prevalent problem. Sriprakash V found that respiratory difficulties caused by a deviated nasal septum are a somewhat common occurrence<sup>10,11</sup>.

VegardBugten explained in this study, some people with a deviated septum require surgery to alleviate their problems. Nasal Septoplasty is the third most common procedure in the ENT profession, and it can be performed under local or general anesthesia<sup>10</sup>.

Men are more likely than women to have septum surgery. In a study conducted by VegardBugten and Sriprakash says the cause for this is unknown, but we believe that men are more likely to engage in activities that are linked to a higher risk of nasal injuries<sup>10,11</sup>.

#### **Conclusion:**

Septoplasty is a common surgery in ENT. Following the doctor's instructions besides surgery after-care is essential, and the success of the surgery may be dependent on it.

#### **Reference:**

1. Serifoglu , Ismail., İlker OZ , İbrahim., Damar , Murat. CagtayBuyukuysal, Mustafa., Tosun , Alptekinand Tokgöz , Özlem(2017).Relationship between the degree and direction of nasal septum deviation and nasal bone morphology.Head and face medicine 13(3):2-6.
2. SW , Delaney., Mathews(2018). Evolution of the Septoplasty: Maximizing Functional and Aesthetic Outcomes in Nasal Surgery. Journal of Otolaryngology 1(1):1-8.
3. Aziz1, Tehnia., L Biron, Vincent., Ansari , Kal and Flores , Carlos(2014). Measurement tools for the diagnosis of nasal septal deviation: a systematic review. Journal of Otolaryngology - Head and Neck Surgery 43(11):2-9.
4. Khamis Hussein , Wae.l, Bazak., Remon(2015). Batten graft septoplasty: Evaluation of a preferred technique .Egyptian Journal of Ear, Nose, Throat and Allied Sciences 16: 223–224.
5. Mogarnad , Mohan., Mohta , Vandana(2017).A Study on Clinical Profile of Deviated Nasal Septum and to determine the Efficacy of the Surgery. Clinical Rhinology: An International Journal 10(2):70-73.
6. Sahin ,Ender., SerkanSongur ,Murat., Kantekin ,Yunus., Ali Bayhan , Hasan., andHaberal Can,Ilknur (2020). Effect of Deviated Nasal Septum on Choroidal Thickness. The Journal of Craniofacial Surgery 31:439-442.
7. Alotaibi , Abdullah D., Ahmed Almutlaq ,Bassam., Alshammari , FahadNashmi and Gadelkarim Ahmed , Hussain 2018.. The Common Clinical Presentation of Patients Selected for Septoplasty in Northern Saudi Arabia. International Journal of Otolaryngology 1-8.
8. Nizamuddin Khan, Mohammad., Nath , Kripamoy., Uddin , Shams(2016). . A clinical study of deviated nasal septum with special reference to conventional and endoscopic septoplast. International Journal of Research in Medical Sciences 4(12) 5165-5171.

9. N, Prayaga.,Moorthy , Srinivas., Kolloju , Srikanth., Madhira , Srivalli., BehmanJowka , Ali(2014).International Journal of Otolaryngology and Head & Neck Surgery 3:75-81.
10. Bugten , Vegard., Helen Nilsen, Ann., Moe Thorstensen , Wenche., Henrik Strand Moxness , Mads(2016).Quality of life and symptoms before and after nasal septoplasty compared with healthy individuals .BMC Ear, Nose and Throat Disorders 16:13.
11. Sriprakash V(2017).International Journal of Otorhinolaryngology and Head and Neck Surgery3(4):842-844.