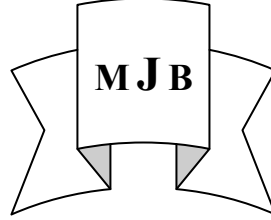


Nasal Septal Deviation, pre and post Operative Symptoms Assessment

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**Abstract**

Prospective study of seventy eight patient presented with signs and symptoms of nasal septal deviation; treated in the department of E.N.T-Hilla teaching and private hospitals from January 2005 to January 2010.

The age of patient is between 18-40 years.

18 female and 60 male were assessed by complete ENT examination including anterior rhinoscopy Fiber optic nasoendoscopy and radiological examination of nasal sinuses ,septal deviation was corrected by septoplasty.Follow up was upto six months.

تقويم الحاجز الأنفي دراسة للأعراض السريرية قبل وبعد العملية**الخلاصة**

دراسة مقارنة منظورة أجريت على (٧٨) مريض يعانون من أعراض سريرية ناتجة عن انحراف الحاجز الأنفي ، راجعوا قسم جراحة الأنف والاذن والحنجرة في مستشفى الحلة التعليمي العام للفترة من (كانون الثاني ٢٠٠٥ لغاية كانون الثاني ٢٠١٠) .

إشتملت الدراسة (٧٨) مريض ١٨ نساء و ٦٠ رجل تراوحت اعمارهم بين (١٨ - ٣٨) سنة .

تم اختيار المرضى على اساس التاريخ المرضي والفحص السريري واخذ الرقائق الشعاعية للجيوب للأنفية مع اجراء الفحوصات المختبرية العامة قبل اجراء العملية .

جميع المرضى أجريت لهم عملية تقويم الحاجز الأنفي ، وتمت متابعتهم بعد العملية لفترة تراوحت (٣ - ٦) اشهر .

تم تسجيل الأعراض السريرية للمرضى قبل وبعد اجراء العملية ، وتمت المقارنة فيما بينهم وخرجنا بالنتائج التالية:

- ١- انسداد الأنف في (١٠٠ %)
- ٢- الصداع (٥٧,٥ %)
- ٣- رشح الأنف (٥٠ %)
- ٤- تهيج البلعوم (٣٨,٥ %)
- ٥- آلام الوجه (٣٤,٥ %)
- ٦- ضعف حاسة الشم (٢٣ %)
- ٧- النزف (٤ %)

Aim

To evaluate the symptoms of nasal septal deviation; before and after surgical correction

Patient and Methods

Seventy eight patients complaining of symptoms of septal deviation of different variety During the period of five years.

Data collected after questionnaires including a lot of questiones.The

examination of each patient include inspection of the shape of the nose;airway assessment, anterior rhinoscopy, fiberoptic nasendoscopy to assess the state of nasal mucosa ,severity and type of septal deviation.

X ray of sinuses done routinely for each patient, other investigations also have been done e.g hematological examination, GUE.....etc
60 patient were males, 18 patient were females .All of them were followed for up to 6 months at monthly intervals.

Questionnaires

- Name:

- Age:

- Sex:

-Chief complaint :

1-Nasal obstruction

A-unilateral

B-bilateral

2-Nasal discharge

3-Headache

4-Bleeding

5-Hyposmia

6-Facial pain

7-Pharyngeal symptoms

-History of trauma

-History of allergy

A-seasonal

B-perinea

-Examination

-Nasal airway examination

A-cotton piece test

B-cottle test

-Anterior rhinoscopy

A-type of septal deviation

B-turbinate examination

-Fiber optic nasendoscopy

-Radiological examination

-Follow up

-Complications

Results

Age incidence

The age range from 18-40 years

Table 1 percentage according to age distribution

Age(years)	Number of patient	percentage
18-20	18	23
21-30	30	38.5
31-40	30	38.5

Table 2 percentage according to sex distribution

Sex	Number of patient	percentage
Male	60	77
Female	18	23

Table 3 percentage according to type of septal deviation

Types of septal deviation	Number of patients	percentage
c shape deviation	48	61.5
S shape deviation	30	38.5

History of trauma

Table 4 percentage according to sex

Sex	Number of patient	History of trauma	percentage
Female	18	3	16.5
Male	60	24	40
Total	78	27	34.5

Table 5 preoperative symptoms and percentage

<u>Incidence of symptoms</u>	<u>Number of patient</u>	<u>Percentage</u>
Nasal obstruction	78	100
Rhinorrhoea	39	50
Facial pain	27	34.5
Headache	45	57.5
Hyposmia	18	23
Bleeding	3	4
Pharyngeal symptoms	30	38.5

Table 6 radiological finding with percentage

<u>Radiological symptoms</u>	<u>Number of patient</u>	<u>Percentage</u>
Normal sinuses	45	57.5
Mucosal thickening	24	31

Post operative results

Table 7 post operative symptoms results

<u>Symptoms</u>	<u>Number of patients</u>	<u>Number of patients improved</u>	<u>Percentage</u>
<u>Nasal obstruction</u>	78	75	96.1
<u>Headache</u>	45	39	86.6
<u>Rhinorrhoea</u>	39	33	89.6
<u>Facial pain</u>	27	27	100
<u>Hyposmia</u>	18	9	50
<u>Bleeding</u>	3	3	100

Post operative complications

Table 8 post operative complications

<u>Complications</u>	<u>Number of patients</u>	<u>Percentage</u>
<u>Crust formation</u>	12	15.3
<u>Hyposmia</u>	9	11.5
<u>Adhesions</u>	3	3.8
<u>Change in the shape of the nose</u>	3	3.8

Discussion

-In our study 78 patient included in a prospective study underwent septoplasty and followed up to 6 months

-Age and sex ratio is3:1 .The range of age was between 18-40 years with average age of 28 years.

-Vuaral s.2008 found male to female ratio3.8:1 and age range was18 -59 years, average was 41 years.

-Haraldson found history of trauma in 63% of cases,78% were male ,while in our study history of trauma found in34.5%

-In our study 45 patients had clear sinuses .57.5% while 11 patients have various pathological conditions .

-In study of J,H Jensen 73% have normal x-ray in in patients with different pathological conditions.

-In our study nasal obstruction is the main complaint similar to finding of Haraldson , of jermedal and sc jupta who found in order of frequency, nasal obstruction

100%,headache58%,pharyngeal symptomes48%,rhinnorrhoea46%,and hyposmia36%.

-Improvement in nasal air way is 96.1% in our study while 66% in study done by jupta.

-Wilson JA found 74% of patient showed relief of nasal obstruction .

-Alessandrini M showed improvement in facial pain in 75% of patient while in our study 100% improved

-A.H Bashir had 28 patients for whom septoplasty was done .only one patient had saddle nasal deformity while in our study 3 patient had nasal deformity post operatively.

In study done by Haraldson change in the shape of the nose was found in 9% of patient-

No septal perforation occurs in our study which is similar to Haraldson study.-

-In study done by Maran 2 patient of 220 patients had septal perforation after septoplasty.

-Adhesions may occur after any nasal surgery.Campell J.Betal showed that 17% of patients developed adhesions, in our study 3.8%of patients reported adhesions after septoplasty.

-Crust formations occurred in 15.3% in our study,Haraldsson found crustations in 33% of his patients.

-Temporary Hyposmia occurred in 11.5% of our patient's .A.H Bashir found hyposmia in 20% of his study.

Conclusion and Recommendations

1-Nasal septal deviation can be improved by surgery .

2-nasal obstruction is the main symptom of nasal septal deviation .

3-crustation is the main post operative complication.

4-nasal endoscope is important to compare pre and post operative finding.

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