




Virtual Telephonic Follow-Up for Patients Undergone Septoplasty Amid the COVID Pandemic

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Abstract Septoplasty is a common procedure in ENT practice with fewer complication rates. Long term follow-up is usually not necessary. The aim of our study is to evaluate the feasibility of virtual telephonic consultation to follow-up the patients in the immediate postoperative period. After excluding the patients based on the criteria, twenty-four patients were telephonically followed up by a resident using structured NOSE questionnaires and the responses were noted. All the patients had improvement in symptoms with 14 patients completely asymptomatic (NOSE score of < 5). Two patients had moderate symptoms (NOSE score 30–50) and 8 patients had mild symptoms (nose score 5–25). Majority of the patients interviewed were satisfied with the telephonic follow up and were willing to accept such patient-friendly services in the future. Virtual Telephonic follow-up of patient undergone uncomplicated septoplasty is a feasible, cost-effective model with a high rate of patient satisfaction.

Keywords Tele-consultation · Virtual follow-up · Septoplasty · COVID · DNS

Introduction

Tele-consultation is an important tool in monitoring patients remotely overcoming the geographical barrier. Not only it saves time and provides convenience to the patient,

it can be a cost-effective alternative for the elective component of patient care [1]. In the wake of COVID-19 pandemic, the Otorhinolaryngologist being in the forefront of care, are at higher risk of infection by physically examining the patient [2]. Therefore, the recommendation is to minimize face to face consultations [3]. The use of innovative models like telephonic virtual consultation can be highly beneficial in such circumstances to maintain trust among patients and caregivers while decreasing the transmission rates by preventing overcrowding.

Deviated nasal septum (DNS) can be the cause of unilateral or bilateral nasal obstruction and has a negative impact on the quality of life of individuals. Septoplasty is the method of choice for the treatment of these patients [4]. It is the most commonly performed ENT surgery in our department. Postoperative complications are also less. Patients undergone elective procedures such as septoplasty can be followed remotely using ICT enabled innovative models with high degree of patient satisfaction rates and also reduces unnecessary hospital visits [5].

Materials and Methods

Retrospective study on patients undergone septoplasty between January 2020 and February 2020 was carried out. Patient demographic profile, contact number, diagnosis, surgical indication, and operation conducted were noted. After obtaining consent from hospital authority, the patient was contacted via telephone by an ENT resident from our department, patient identity was confirmed and assessed using NOSE Scale (Nasal obstruction and symptom evaluation).

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NOSE Scale [6]

Characteristic	Asymptomatic	Very mild	Moderate	Fairly bad	Severe
Nasal blockage/ obstruction	0	1	2	3	4
Trouble breathing through the nose	0	1	2	3	4
Trouble sleeping	0	1	2	3	4
Unable to get enough air through during exertion	0	1	2	3	4
Mouth breathing	0	1	2	3	4

Inclusion criteria: Patients presented with unilateral or bilateral nasal obstruction with DNS, underwent septoplasty between January and February 2020 were included. First follow up was done after 1-week post-discharge. None had any complications intraoperative and on first follow-up.

Exclusion criteria: Patient less than 18 years of age, combined FESS, not available for follow-up, revision cases were excluded.

During the telephonic follow-up, patient's identity was confirmed and asked about nasal symptoms using the NOSE scale and acceptability of the method of follow-up, results were tabulated.

Results

Twenty-four patients who had nasal symptom with deviated nasal septum were included in the study. In all patients, septoplasty was performed refashioning the most deviated part of the septum. Five patients underwent minor adjunct surgeries such as the lateralisation of turbinates or conchoplasty. Mean age of the patients were 31.26 years and the mean duration of virtual telephonic follow up was 36.7 days. Patients were assessed and NOSE score was summed up and multiplied by 5 using the Likert scale, to obtain the final score. In our study, all patients had improvement in symptoms with 14 patients completely asymptomatic (NOSE score of < 5). Two patients had moderate symptoms (NOSE score 30–50) and 8 patients had mild symptoms (nose score 5–25). Majority of the patients interviewed were satisfied with the telephonic follow up and were willing to accept such patient-friendly services in future (83% satisfied or very satisfied).

Post op NOSE score range	Number of patients	Interpretation
< 5	14	Asymptomatic
5–25	8	Mild symptoms
30–50	2	Moderate symptoms

Discussion

People all over the world are affected by the novel corona virus originated in Wuhan City, China [7]. It is the fifth pandemic since 1918 Influenza. The World Health Organization (WHO) on March 11, 2020, declared the COVID-19 a global pandemic [8]. Asymptomatic transmission is an important aspect of coronavirus [9] and ENT surgeons are at risk of contacting the virus during the physical examination due to shedding of virus from nasopharynx and oropharynx [10]. Guidelines have been issued to restrict physical consultations for non-emergency situations. In such circumstances remote follow-up of operated elective cases using Information Communication Technology (ICT) can be highly beneficial.

The study conducted in East Sussex Healthcare NHS Trust, UK demonstrated Telephonic follow up as a safe, cost-effective, and efficient way of managing patients who underwent nasal surgery [11]. This innovative model can be used during this pandemic to remotely monitor and screen the patients in the postoperative period reducing the risk of nosocomial transmission of the virus. The NOSE scale is a well-validated reliable nasal outcome questionnaire developed by Stewart et al., for subjective assessment of nasal obstruction within the last 1 month. The questions can be answered using a 5-point Likert scale with a maximum score of 4 (not a problem 0, severe problem 4). Summed up scores can be scaled from 0 to 100, multiplying the base scores by 5(6).

In our study, patients who have undergone septoplasty between January and February 2020, were interviewed and assessed telephonically using the NOSE scale and categorized according to the responses. The majority of the patients were asymptomatic (59%), 8 patients had mild symptoms (NOSE score between 5 and 25). As compared to the study conducted by Stewart et al., where significant improvement was seen in 67% of cases (6). Only 2 (8%) had severe symptoms with NOSE score between 30 and 50 and the patients were advised to visit OPD for further consultation. Twenty patients (83%) were highly satisfied by the telephonic follow-up and accepted that telephonic follow-up was convenient for them.

Conclusion

Septoplasty is one of the commonly performed surgeries in Otorhinolaryngology. The procedures have evolved over the years to the present situation where postoperative complication rates are relatively less and has better patient outcome. Though long term follow-up in uncomplicated cases is usually not required. Follow-up visits after 1 week and 6 weeks post-discharge are common. In the present COVID-19 crisis, hospitals are instructed to keep reduced patient inflow by avoiding non-emergency visits. It is a part of the hospital resources management strategy so that a pool of healthcare personals can be maintained for emergency situations. However, the present study demonstrates that the problem can be solved by virtual follow-ups using telephone, which is feasible, safe, and also enhances patient satisfaction.

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Availability of Data and Material The authors confirm that the data supporting the findings of this study are available within the article.

Compliance with Ethical Standards

Conflicts of interest No potential conflict of interest was reported by the authors.

Ethics Approval Ethical approval was obtained from Institute ethical committee.

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