

Feasibility of Day Case Surgery in ENT

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Objective: A variety of surgical procedures in otolaryngology are treated as day case surgery. The patients are screened and selected before giving an appointment for certain surgical procedures. There are well-established criterions for suitability of day case surgery. In this study 500 patients were interviewed to see the suitability for day case surgery. A Combination of domestic problems, anesthesia problems, and inability to co-op with day case surgery criterion are discussed. **Design:** It is a prospective study. **Place and duration of study:** This study was conducted at ENT Department of Lahore General Hospital Lahore. From January 2000 to June 2002. **Subjects & Methods:** A Performa was filled after interviewing the patients to see the suitability for day case surgery. The problems of patients, who were unable to fulfill the criteria, are discussed in detail. **Results:** This study proves that more than 85% of patients are not suitable for day case surgery in our setup. **Conclusion:** Day case surgery is not feasible in patients coming from rural areas.

Key Words : Day case surgery, Risk, Otolaryngology, setup in Government Hospitals.

Day case surgery was introduced in early nineteenth century and established few years back. It was encouraged to cut-down the rising cost of health care. Much concern exists regarding the patients safety in the immediate postoperative period at home. No doubt surgical procedures are performed in a fit patient when admitted in the hospital in the morning and discharged in the evening. Day surgery is an increasingly important part of elective surgery. It currently accounts for 50% of elective surgery in the United Kingdom and 60% or more in the USA and Canada with predictions of increase in future. The quality in day surgery should be high standard as expected from in patient surgery. Day surgery units (DSU) are the best way to achieve this goal.

In this study 500 patients were interviewed to see whether they fulfill the criteria for day case surgery and to conclude if this facility works in our socio-political and health setup or not. Doctors, attending the patient in out patient department fill the Performa. All patients undergo routine investigations, medical and anesthesia checkup for fitness purpose.

Material & Methods

500 patients were interviewed and assessed for fitness of day case surgery randomly coming to the ENT OPD of Lahore General Hospital during January 2000 to June 2002. the criteria to fill the Performa was patient age more than 5 years and certain day case procedure, the procedures are septoplasty, Tonsillectomy, adenoidectomy, laryngoscopy and biopsy, manipulation of fracture nasal bone, myringoplasty, myringotomy & grommets insertion, nasal polypectomy. The Performa has two segments.

1. Medical selection criteria
2. Social and domestic criteria

In medical selection criteria patient was asked any co-existing medical problem which need some management like asthma, Diabetes Mellitus, Hypertension, other wise patient is fit as per standard (American Society of Anesthesiologists)^{1,2}.

In social and domestic problem it was asked^{2,3,4,5}

1. Patient and attendants education.
2. Conveyance facility.
3. Patient residence (distance from hospital and condition of road).
4. Facilities at home i.e. how many people living per room, toilet facility & few stairs to climb.
5. Nearby clinic, dispensary or health centers.
6. Telephone facility.

The selection criteria to perform day case surgery are:

1. Patient medically fit i.e. ASA 1 or 2.
2. Conveyance facility should be present.
3. Telephone facility at hand.
4. Patient residence within 15km.

The 500 interviewed patients are divided into two groups.

1. Those who do not full fill the criteria of day case surgery & these patients will not be discussed.
2. Number of patient who fulfill the criteria for day case surgery but have to be kept in hospital due to their domestic and social problems.
3. They are discussed further to see our inability to make setup for day case surgery.

Results

Two categories of patient were studied. Out of 500 patients, 85 did not fulfill the criteria of day case surgery due to medical problem. 415 patients who live in the range of 15 km. have domestic problems.

Only 93 out of 415 had conveyance facility.

305 out of 415 had no telephone contact.

360 out of 415 had no standard housing and Toilet facility.

115 out of 415 only were educated.

360 out of 415 was from poor socioeconomic class.

Table 1. Age and sex (n=500)

Minimum age	5 years
Maximum age	65 years
Mean age	26 years
Male	320
Female	180

Table 2. Medical problems (n=85)

Asthma	22
Diabetes mellitus	38
Hypertension	20
Developmental problem	01
Down syndrome	02
CNS problems (cerebral problem)	02

Table 3. Domestic problems (n=415)

Literacy rate	115 educated
Housing problem	360
Conveyance problem	322
No telephone facility	305

Discussion

Procedure for day case surgery took start in the beginning of the nineteenth century. However, it has gained popularity over the last decade. In day case surgery a surgical procedure is performed on a fit patient with his willingness.

Lahore General Hospital is situated at the one end of the city and most of the people are living in nearby villages and farms. It was concluded that day case surgery offer certain benefits over in-patient treatment such as reduction of cost, convenience to patient and his relatives and also reduction in the waiting list of the hospital. In some studies day case surgery is recommended for some procedure because it was found safe in certain circumstances. But in our set up illiteracy rate is very high, no connecting roads from villages to city, residences are small, congested, and no good ventilation and poor hygienic condition make day case surgery not feasible rather risky in the sense that complications are not recognized in time which may make its management difficult.

In one study where suitability of ENT day case procedure for children was analyzed, it was found that coexisting medical condition that could interfere with both surgery and anesthesia was 8%⁶. A combination of Advance social and domestic conditions including the number of Adult, and children resident, number of bed room and individuals sleeping in the child bed room, the number of car, and presence of telephone was found in 34% of cases.

In prospective study which was conducted in order to check the procedure's feasibility in a large parries university children's hospital, to describe the involved population and to search for the possible benefits which could be made by a public hospital form and increase in day surgery practice for tonsillectomy. The medical and social findings tend to limit a large extension of this procedure in our setup. In one study that was conducted on 5182 patients it is mentioned that 2% of the patient were admitted for social reassume⁸.

The study conducted by Senapati A. for suitability for day case surgery in urban environment is discussed. He

studied 100 consecutive unselected patients admitted for surgical procedures considered to be suitable for day case surgery. Their age, fitness and social details were recorded and they were asked both before surgery and after discharge by a postal questionnaire, whether they would have preferred treatment as an outpatient.

Ninety six were considered to be medically fit for day case surgery but 10 patients lived alone, 7 had no suitable companion, 22 had too many stairs to climb, 13 lived too far from the hospital and two could not be provided a lift at home. In his experience over half the patients initially seemed suitable for day case surgery would be unsuitable⁹.

In our study 85 patient out of 500 were unfit for day case surgery due to medical reason.

300 out of 415 were under matric/illiterate.

305 out of 415 have no phone contact.

Ultimately it is found that out of 500 patients, 57 were up to mark for day case surgery. This number is very small as compared to different centres abroad.

In U.K 50% of elective procedure are done in day surgery unit. As our domestic proves are such that it takes a long time to improve it. Day surgery is not feasible that is why most of the Govt. Hospitals have no separate day surgery units.

Conclusion

Day surgery is well recognized in the developed countries. It is really beneficial for the patient and Hospital management. But due to present status of patient in our Government Hospitals, its application is not feasible.

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