To assess the epidemiology of day care surgery in a tertiary care center

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Abstract

Background: The aim of the present study is to retrospectively analyze the epidemiology of patients admitted in the day care unit of the surgery department.

Methods: This study has been done in the Department of General surgery on patients attending the OPD as well as admitted for surgery

Results: 56% patients were from urban area and 44% were from rural area. 31 were staying in an area which was within 00 to 05 km from hospital, 26 were in an area within 06 to 10 km, 24 were staying within 11 to 15 km, 9 were staying within 16 to 20 km and 10 were staying in an area more than 20 km away from hospital.

Conclusion: Age and sex was not any criteria for patient selection for day care surgery.

Keywords: Day care, Area, Age, Sex, Distance.

Introduction

The health care industry has faced several developments and changes in the last two decade. At present health care system is being motivated by factors such as financial management, patient satisfaction with health care and time management. Recent studies have indicated that day care surgery or ambulatory surgery (AS) can offer significant advantages over inpatient surgery. The increased outpatient procedures or day care surgeries has largely been motivated by advances in medical technology and changes in payment process, which have allowed the ambulatory/outpatient surgery to become more lucrative in recent years. In medical insurance driven health service areas such as the USA, there has been increase from 35% in the 1970s to now 95% payers who cover day care surgeries.

In India day care surgeries are still a new concept in health care. Elective surgical procedures in selected patients can be performed easily and patients can safely return home on the same day. This saves time and finances of the patients and their families as well as decreases the burden on tertiary hospitals. The aim of the present study is to retrospectively analyze the epidemiology of patients admitted in the day care unit of the surgery department.

Materials and Methods

Study Design: Observational study

Patients were selected on OPD basis for different day care surgical procedures in Department of General Surgery

Selection of Cases

Inclusion criteria: -for those operated in Major OT
• Patients were assessed as American Society of Anesthesiologists (ASA) classes I or II.
• For most procedures under GA and SA, availability of a responsible adult was ensured who escorted the patient home and provided support for the first 24 h.
• Patient stayed within 30 min of travelling distance from the hospital with adequate motivational level.
• Patient who gave informed consent for the study.
• All the cases operated under Local anaesthesia were not admitted.

**Exclusion criteria**

Patient with the following criteria were excluded:
• Patients with extreme obesity and co-morbid conditions like poorly controlled diabetes, hypertension, and coronary artery disease or ischemic heart disease and with ASA III and IV.

**Observations**

**Age Distribution**

There was no age limit in our study. Out of 100 patients 13 were of age group 0-20 years, 53 were of age group 21-40 years, 25 were of age group 41-60 years, 9 were of age group >60 years.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency (n)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Female</td>
<td>69</td>
<td>69</td>
</tr>
</tbody>
</table>

Out of 100 patients, 31 were males and 69 were females.

**Table 2: Area**

<table>
<thead>
<tr>
<th>Address</th>
<th>Frequency (n)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>56</td>
<td>56</td>
</tr>
<tr>
<td>Rural</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>

Out of 100 patients 56 were of urban background and 44 were of rural background.

**Table 3: Distance of Home from Hospital**

<table>
<thead>
<tr>
<th>Distance of home from hospital (Km)</th>
<th>Frequency (n)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>6-10</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>11-15</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>16-20</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>&gt;20</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Out of 100 patients 31 were staying in an area which was within 00 to 05 km from hospital, 26 were in an area within 06 to 10 km, 24 were staying within 11 to 15 km, 9 were staying within 16 to 20 km and 10 were staying in an area more than 20 km away from hospital.

**Discussion**

There was no age limit in our study. Out of 100 patients 13 were of age group 0-20 years, 53 were of age group 21-40 years, 25 were of age group 41-60 years, 9 were of age group >60 years. There were no adverse peri-operative outcomes in the study depending on age factors and age has nothing to do with the acceptability for Day care Surgery. J.Fortier et al conducted a prospective cohort study of 15127 patients undergoing ambulatory surgery and found that age did not predict unanticipated admission. Out of 100 patients 31 were male and 69 were female. There was nothing in literature to suggest about better acceptance and
success of Day Care Surgery in patients depending upon the gender being male or female.

In this present study 56% patients were from urban area and 44% were from rural area. There is nothing in literature to suggest about the acceptability of the procedure depending upon the geographical distribution of the patients upon the area being urban or rural. A study conducted by S.Bal et al at AIIMS, New Delhi, India where 93% patients were successfully discharged after day care surgery in patient from a distance of 20 Km from hospital.7

Conclusion
Age and sex was not any criteria for patient selection for day care surgery.

References
5. Arun V D, Kunal M V. Review of day care surgery in a rural set up: An observational study.