



## Outcomes and acceptance of day care surgery- An institutional experience

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### Abstract:

**Introduction:** Day surgery is characterised as patient admission and discharge following a specific procedure during a 12-hour workday. A portion of the rise in outpatient procedures, also known as day care surgeries, can be attributed to advancements in medical technology and modifications in the finance system, which have made them more acceptable recently. Day care surgeries are still in their infancy in India. In some individuals, elective surgical procedures can be performed easily, and the patient can go home the same day. Patients wait less time, spend less money, and return to their homes sooner as a result. Additionally, it lessens the workload on tertiary hospitals. The current study aims at describing the outcomes and acceptance of day care surgery in the Indian setup<sup>1</sup>.

**Key words:** Day care surgery, Same day surgery,

### Aims and Objectives:

To evaluate the satisfaction and acceptance of patients with reference to day care procedures as well as the results of the day care surgery.

### Materials & Methods:

The general surgery department of Narayana Medical College in Nellore, Andhra Pradesh, conducted this study prospectively between June 2019 and December 2021. 584 procedures were carried out at the Department of General Surgery over a two-year period. Only 88 of these patients met the inclusion criteria, making them eligible.

The medical histories, types of procedures, and duration of stay of each patient were collected, and they were checked on the third and seventh post-operative days.

In order to qualify as a day care surgery, a patient must undergo an elective procedure on the day of admission and be released from the hospital within 24 hours of admission.

### Inclusion criteria:

- Age more than 1 year and less than 75 years.
- Medically fit and stable patient (ASA class 1,2 and 3)
- Well motivated and psychological state.
- Ability to eat – drink within reasonable time scale.
- Availability of transport, mode of communication and responsible relative at home.
- Patients who fulfill the condition of day care surgery and shall follow up on day 3 and day 7.



### Exclusion criteria:

Patients who were in the hospital for more than 24 hours or who had insufficient follow-up data were omitted from the study.

On the third and seventh postoperatively, all day care surgery patients were examined for outcome and complications such as nausea and vomiting, wound infection, requirement for re-admission, and discomfort at the surgical site.

Post-operative pain assessment was done using visual pain analogue, with pain scale score from 0-2 was taken as little to no pain, 3-5 was taken as fair amount of pain and 6-10 was taken as lot of pain.

Two weeks after discharge, Satisfaction of the patients were assessed by giving out three questions to them:

1. If given the option, would the patient choose day surgery in the future?
2. Were they satisfied with their day surgery experience?
3. Would you recommend day surgery to a friend who needed such treatment?

To make the degree of satisfaction more rigorous, patients were only rated as satisfied if they answered yes to all 3 of these questions.

### RESULTS:

A total of 584 surgeries were done in the department of general surgery from the period of December 2019 to December 2021 out of which 88 patients were satisfying the inclusion criteria. In the study 35(39.77%) were male patients and 53 (60.23%) were female patients. The age range of the patients in this study was between 18-72 years with the mean age being 45.841 ±15.918 years.

Parameters	Values (n=88)
Mean age	45.84 ± 15.91 years
Men	N=35
Women	N=53
Mean time of discharge	8.05 ± 2.62 hours

Patients' experience after surgery:

Parameter	POD 0		POD 3	
	Yes	No	Yes	No
Nausea, Vomiting	17 (19.3%)	71 (80.7%)	0	88 (100%)

Adverse events:

Parameter	POD 3	POD 7
Bleeding	9 (10.2%)	0
Wound infection	11 (12.5%)	1 (1.1%)
Wound dehiscence	5 (5.7%)	0
Allergy	2 (2.3%)	0

**Post-operative pain assessment:**

POD 3			POD 7		
Little amount of pain	Fair amount of pain	Lot of pain	Little amount of pain	Fair amount of pain	Lot of pain
65 (73.9%)	17 (19.3%)	6 (6.8%)	84 (95.5%)	4 (4.5%)	0

77 (87.5%) patients responded positively with good acceptance of day care surgery suggesting that they were satisfied with the day care surgery, whereas 11 (12.5%) patients responded that they were not satisfied with day care surgery.

**Discussion:**

This study shows that the patients were largely satisfied with the care they received, irrespective of the type of surgery. When it comes to fairly minor operational procedures, satisfaction scores are difficult to assess. With a rigorous selection process, it would be surprising if the vast majority of patients did not have positive outcomes. Almost all assessments reveal that only a few patients have voiced dissatisfaction of their care, with minimum 80% of respondents indicating satisfaction for every given question<sup>2,3</sup>. Only 15.06% (88 out of 584) of the patients have been included in the study in the department of general surgery in our hospital. In comparison to studies conducted in Europe and the United States, our performance is lower. The main exclusion criteria were not able to obtain consent for daycare surgeries due to the stigma of the patients, to stay in the hospital post-surgery. One of the main reasons for not consenting was to obtain professional care immediately after surgery or the inability of the patients' attendees to provide quality care, other reason being patient being too far from the institution and would avoid travel immediately postoperatively<sup>4,5</sup>. This is in contrast to western countries where more than half of the surgeries are being performed on a daycare basis. Postoperative experiences such as discharge advice, time of discharge, follow ups and recovery time were important factors where the major importance has to be given to discharge advice<sup>6</sup>. Proper warnings and adequate management counselling prepared the patient and their care givers to prepare in case of adverse events. Providing satisfactory discharge advice had an impact on patients' satisfaction<sup>7,8</sup>.

**Conclusion:**

This study concludes that day-care procedures may be conducted in India with very minimal morbidity and no mortality. Day care results indicate quicker and faster recovery. Patients



can readily return to their typical surroundings, such as their homes and everyday activities. Day care surgeries in India has not been on a rapid progression scale when compared to western countries. The main reasons appear to be a lack of awareness of the services among patients and caregivers, fear of complications, hospital distance from their homes, and a shortage of health personnel trained to perform these procedures.

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