

To assess the compliance and satisfaction of patients for day care surgery

¹Dr Shamsher Singh, ²Dr Vishal Prashar

¹⁻²Ms General Surgery, IGMCM Shimla

Corresponding Author: Dr Vishal Prashar, Ms General Surgery, IGMCM Shimla.

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Abstract

Background: Day care surgery offers advantages for health care delivery system around the world and so rates have steadily increased in both developed and developing countries.

Methods: Day care surgery offers advantages for health care delivery system around the world and so rates have steadily increased in both developed and developing countries.

Results: Out of 155 patient 139 (89.7%) patients were found be satisfied when judged with questionnaire asked postoperatively on day 7 by using Likert scale and 16 (10.3%) patients were found to be unsatisfied with day care surgery.

Conclusion: This study clearly shows that day care surgery is feasible and safe with a good postoperative satisfaction score in a hilly terrain if patients are selected carefully.

Keywords: satisfaction score, day care surgery, Post-operative.

Introduction

According to present literature, Day Care Surgeries have been and are mainly performed in plain areas having proper road connectivity to every doorsteps in residential area. In hilly areas it is not possible, in

developing and under developed countries, as even if the roads are present they are not metalled. People have to walk through steep gradient and stairs pathways to reach their home from roadside. Also people in plains are aware of the term Day Care Surgery more as compared to people residing in hilly areas due to more exposure and increased literacy rate.¹⁻²

People in hilly areas are afraid of or are in doubt about the decision regarding discharge on same day of surgery because of following reasons-

- a) They think the stitches will get loosen or get broken because of travelling on uneven roads.
 - b) Difficulty in walking steep pathways or climbing stairs on the day of surgery.
 - c) Difficulty in carrying patient back to hospital, if some serious problem occur during post operative period at home after discharge.
 - d) They have to return back to tertiary care hospital if problem occur because in hilly areas nearby 24 X 7 Primary Hospital Centre care are sparsely placed.
- Hence this study was undertaken.

Materials and Methods

Study Period: July 2017-Dec 2018; which includes the period of enrolment, analysis and writing.

Setting: Day care surgery offers advantages for health care delivery system around the world and so rates have steadily increased in both developed and developing countries.

Study Design: Observational study

Sample Size: Following operations were performed

Orchidopexy	Excision of ganglion, lipoma
Circumcision	TURBT, Cystoscopy, DJ Stenting
Mesh hernia repair	Herniotomy
Excision of breast lump	Enucleation of sebaceous cysts
Excision of soft tissue tumor	Enucleation of dermoid cysts
Anal fissure dilatation	Abscess Drainage
Laparoscopic Appendectomy	Surgeries for Vericocoele, Hydrocele
Laparoscopic cholecystectomy	Surgeries for Fissure/Fistula in ano
Varicose vein stripping or ligation	Excision of pilonidal-sinus

Patients were selected on OPD basis for different day care surgical procedures in Department of General Surgery at IGMSC Shimla, during time period of July 2017 to December 2018.

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

This observational study was conducted in the Department of surgery, I.G. Medical College, Shimla from 1st July 2017 to 31st December 2018 and included 155 patients selected for day care surgery who presented in surgery unit 3 O.P.D / emergency. Patients were selected for day care surgery after taking written consent from patient / attendant in case of minors and disabled, after explaining the procedure in their own language.

Out of 155 surgeries 74 were Laparoscopic Cholecystectomies, 9 were Laparoscopic Appendectomies, 32 were excision of sebaceous cyst/lipoma/dermoid cyst etc, 5 were of herniotomy for congenital hernia, 1 was Lord's procedure of hydrocele, 14 were excision of fibroadenomas of breast, 5 were of wide local excision of soft tissue tumor of size upto 2cm, 3 were of anatomical repair of paraumbilical hernia, 1 was vericocoelectomy for vericocoele, 1 was excision of pilonidal sinus, 2 were circumcisions for phimosis, 1 was check cystoscopy for follow up case of carcinoma urinary bladder, 1 was TURBT for urinary bladder tumor of approx 2cm size, 1 was urethral stone retrieval under local anesthesia, 2 were LTFMH for inguinal hernia, 1 was vasovasotomy for secondary

infertility and 2 were multiple plebectomies for varicose veins lower limb.

Table 1: Physical Limitation Due To Pain on Post-Operative Day -1

Score level (N=155)	Frequency(n)	Frequency (%)
Severe(8-16)	0	0
Moderate(17-24)	2	1.3
Minimal(25-31)	12	7.7
No limitation(32-40)	141	91

Maximum Score=40, Minimum Score=8

Out of 155 patients 141(91%) had no physical limitation due to pain, 12 (7.7%) had minimal limitation, 2 (1.3%) had moderate limitation and none had severe limitation.

Table 2: Physical Limitation Due To Pain on Post-Operative Day -2

Score level (N=155)	Frequency(n)	Frequency (%)
Severe(8-16)	0	0
Moderate(17-24)	2	1.3
Minimal(25-31)	3	1.9
No limitation(32-40)	150	96.8

Maximum Score=40, Minimum Score=8

Out of 155 patients 150 (96.8%) had no physical limitation due to pain, 3 (1.9%) had minimal limitation, 2 (1.3%) had moderate limitation and none had severe limitation.

Table 3: Patient Satisfaction

Variables	Options	Frequency(n)	Frequency (%)
Post operative satisfaction score	Not satisfied	16	10.3
	Satisfied	139	89.7

Out of 155 patient 139 (89.7%) patients were found be satisfied when judged with questionnaire asked postoperatively on day 7 by using Likert scale and 16 (10.3%) patients were found to be unsatisfied with day care surgery. Unsatisfied patients included, 9 patient of laparoscopic cholecystectomy (2 due to conversion to open procedure, 3 due to post operative pain management, 3 due to early discharge and 1 due to readmission for shortness of breath which was managed conservatively, 2 patients of LTFMH due to urinary retention and post operative pain management, 2 patients of anatomical repair of paraumbilical hernia, 2 patients of laparoscopic appendectomy and 1 patient of wide local excision for soft tissue tumor due to early discharge.

Discussion

At the turn of 20th century, the foundation for modern day surgery was laid by James Nicoll(1869-1921) with his work at Sick Children's Hospital and Dispensary in Glasgow, Scotland. He operated a large number of children for condition such as hernia, phimosis, mastoid disease, cleft palate, talipes equines and spina bifida on day basis.³

In 1909, Nicoll reported in the British Medical Journal, the overall success of day surgery treatment in 8988 pediatrics cases.⁴ Based on Nicoll's concept first hospital based Ambulatory surgery unit was developed at the University of Calofornia in Los Angles, USA.⁵

Out of 155 patient 139 (90%) patients were found be satisfied and 16 (10%) patients were found to be unsatisfied when judged with questionnaire asked postoperatively on day 7. Unsatisfied patient's included 9 laparoscopic cholecystectomy patients (2 due to conversion to open procedure, 3 due to postoperative pain management, 3 due to early discharge and 1 due to readmission for shortness of breath which was managed

conservatively), 2 patients of LTFMH due to urinary retention and post operative pain management, 2 patients of anatomical repair of paraumbilical hernia, 2 patients were of laparoscopic appendectomy and 1 patient of wide local excision for soft tissue tumor due to early discharge. It is comparable to the study conducted by Basil J. Ammori where post-operative satisfaction was assessed with questionnaire and 94% were satisfied and 6% were unsatisfied mostly due to same day discharge, postoperative nausea, vomiting and pain.⁶

Conclusion

This study clearly shows that day care surgery is feasible and safe with a good postoperative satisfaction score in a hilly terrain if patients are selected carefully.

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