

AN AUDIT OF PATIENTS' SATISFACTION AFTER ADULT DAY-CASE SURGERY AT AYUB TEACHING HOSPITAL, ABBOTTABAD

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Background: Day-case surgery has become an important component in the provision of surgical care in the Western countries. This study was done to introduce the concept of day-case surgery and assess the patients' satisfaction after day case general surgery in our set up with vast rural communities lacking medical facilities and no day-case surgery units in the hospitals. **Methods:** All those patients suitable for day-case surgery and who accepted day-case surgery for general surgical procedures in General Surgical 'A' unit of Ayub Teaching Hospital, Abbottabad were interviewed after the operation on follow up visits. Questions were asked about their satisfaction with day-case surgery. If they were not satisfied, the reasons for dissatisfaction were noted. Direct admissions and re-admissions after day-case surgery were recorded. Any complications in the postoperative period were also noted. The patient's preference for a similar procedure as day-case in future was also recorded. **Results:** There were 122 patients in this study. 60(49%) were operated under general anesthesia and 62(51%) under local anesthesia. Forty Nine (40%) patients were satisfied while 73(60%) were not satisfied with day-case surgery. Six (5 %) patients were admitted directly after day-case surgery while 7(5.7%) patients were admitted after discharge. Complications occurred in 41(33.6%) patients at home. Wound complications and pain were the most common morbidity encountered by the patients. Twenty eight (23%) patients contacted a hospital or a doctor in the early postoperative period. Sixty two (51%) patients would prefer operation as in-patient while 74 (60.6 %) would prefer an overnight stay after the operation next time. **Conclusions:** Patients' satisfaction with day-case surgery in Ayub Teaching Hospital is not high. Short-stay surgery would be more appropriate in our set up.

Keywords: Day-case surgery, patients satisfaction, complications

INTRODUCTION

A surgical day case is a patient who is admitted for investigation or operation on a planned, non-resident basis and who requires facilities for recovery. Not included in this definition are minor cases performed under local anesthesia not requiring an inpatient bed¹. Day-case surgery is increasing in the developed countries. It is endorsed by the Royal College of Surgeons of England.² Day-case surgery reduces the burden of hospitalization leaving more hospital beds vacant for better utilization. It also shortens the hospital waiting lists and decreases the hospital costs.³ An important goal of day-case surgery is to avoid unnecessary admissions yet providing the patients with the same quality of medical care and personal satisfaction. This study was done to introduce day-case surgery concept and assess the local acceptance of day-case surgery in our set up with vast rural population lacking medical facilities, illiteracy, poor communities and absence of proper day-case centers in the hospitals. This study also presents some problems that need to be addressed to make day-case surgery acceptable by the patients.

MATERIALS AND METHODS

From October 2001 to March 2003, 140 patients suitable for day-case general surgical procedures accepted the offer of day-case surgery. The patients were selected in accordance with the guidelines previously established.² Patients coming from far-off places who agreed to stay with their relatives or a hotel nearby were also included. In the OPD, the patients were informed about the surgery, the expected postoperative course and possible complications. All the necessary investigations were carried out as outpatients. The patients were entered on the routine general surgical list and the same operation theatre was used. They were instructed to be nil per oral for 4 hours on the day of operation. The patients reported in the surgical 'A' unit where they were prepared and sent to the theatre in turn. General anesthesia cases were operated upon first allowing time for recovery. Thiopentone Sodium, Halothane or Ketamine were used for General Anesthesia while 5% Bupivacaine and 1% Lignocaine with Adrenaline 1:100000 were used for Local anesthesia. After the operation, patients were kept in the recovery room till they were fully conscious and then sent back to the ward. They were discharged 4 to 8 hours after the operation on Ibuprofen 400-600 mg three times a day and oral antibiotics. Before discharge, they were mobilized and had a drink. The patients were given written and verbal instructions to report immediately in the ward or OPD if any complications occurred. They were also instructed to come for follow up in the ward or OPD one week after the operation when the stitches were removed and dressings were changed. Readmission after discharge was recorded. Eighteen patients did not report for follow up and are also not included in the study, 122 patients thus form the study group.

In the follow up, the patients were asked the following questions.

1. Are you satisfied with this form of surgery?
2. If not, specify the reasons for dissatisfaction.
3. What complications occurred in the postoperative period?
4. Did you consult any doctor for these complications?
5. Would you prefer similar operation as in- patient next time?
6. Would you prefer an overnight stay for a similar operation next time?

RESULTS

There were 122 patients in this study. The operations performed are shown in Table-1. General anesthesia was employed in 60(49%) cases and local anesthesia in 62(51%).

Table-1: Operations performed as day cases (n = 122)

Operations	Number (%)
Inguinal hernia	33 (27%)
Breast lumps	16 (13%)
Varicocoele	13 (10.6%)

Hydrocoele	13 (10.6%)
Haemorrhoidectomy	12 (9.8%)
Perianal fistula	10 (8.1%)
Epigastric hernia	08 (6.5%)
Epididymal cysts	05 (4%)
Skin tumors	04 (3.2%)
Para-umbilical hernia	02 (1.6%)
Lymph node biopsy	02 (1.6 %)
Fissurectomy	02 (1.6 %)
Orchidectomy	02 (1.6%)

Forty Nine (40%) patients were satisfied while 73 (60%) patients were not satisfied with day-case surgery. The reasons for dissatisfaction are shown in Table-2, indicating that most patients felt they were not fit enough to be discharged.

Table-2: Reasons for dissatisfaction with day surgery (n = 73)

Reasons	Number
Not fit for discharge	52 (42.5 %)
Posoperative complications	41(33.5%)
Cost of day case surgery	17 (13.8 %)

The postoperative complications are shown in Table-3. Moderate to severe pain was the most common postoperative complication. 28 (23.7 %) patients contacted a hospital or a doctor for early postoperative complications. 6(5%) patients were admitted directly in the ward after surgery One had operation late in the afternoon, one patient had more extensive surgery than expected while one patient had severe nausea and vomiting in the postoperative period. Two patients had severe pain in the postoperative period. One patient needed a drainage tube after herniorrhaphy for paraumbilical hernia. 7(5.7%) patients were readmitted after discharge for various complications. One patient had retention of urine after herniorrhaphy, one patient had bleeding after haemorrhoidectomy, one patient had massive scrotal edema after hydrocoele & one had severe pain after herniorrhaphy. Three patients were admitted after fifth day with wound infection. 62 (51%) patients would prefer next operation as inpatients. 74 (61 %) patients would prefer overnight stay next time. 20 (16.3%) Patients who initially agreed for day case surgery were not willing for discharge due to reasons shown in Table 4.

Table-3: Posoperative complications(n = 41)

Complications	Number
Severe pain	29 (23.7%)
Nausea	04 (3.2%)

Vomiting	03 (2.4 %)
Headache	03 (2.4%)
Retention of urine	02 (1.6%)
Bleeding	02 (1.6%)
Wound infection	02 (1.6%)
Massive scrotal edema	02 (1.6%)

Table-4: Reasons for not willing for discharge (n=20)

Reasons	Number
Apprehensions about post-operative course	12 (9.8%)
Residence far from hospital	10 (8%)
No medical assistance	08 (6.5%)
Unhygienic living conditions	06 (4.9%)
Hot climate	04 (3.2%)
No electricity at home	04 (3.2%)

DISCUSSION

Day-case surgery has expanded remarkably in the developed countries and many general surgical, urological, gynaecological and orthopaedic operations can safely be done as day-case procedures.⁴ In many major institutions, over 50% of all the procedures can now be conducted on a day-only basis, resulting in significant savings of hospital beds and management costs.⁵ In Pakistan, day case surgery has not developed in a similar way. However day-case surgery should be continuously evaluated so that the quality of healthcare is not compromised. Patients' satisfaction is an important component of quality of medical care. Any day-case surgery program must take into account the satisfaction of the patients. A survey of patients' satisfaction with day-case surgery is a reliable method of assessing the quality of day-case surgery.⁶ The patients are dissatisfied when the treatment does not match up to their expectation.

Seventy three (60%) patients in this study showed their dissatisfaction with day-case surgery, which is very high, compared to other studies.^{7,8} In well established day-case surgery units patient satisfaction rates for day surgery of over 90% have been reported for general surgery.^{4,8} Wong et al reported 90% patient satisfaction while Bain et al reported 80% patient satisfaction with day-case surgery.^{7,9} Dissatisfaction is even higher than other studies in Africa where socio-economic conditions are similar to ours.¹⁰ Fifty two (42.5%) patients were dissatisfied because they felt they were not well enough to be discharged because of nausea, vomiting, dizziness or pain. This pattern of morbidity early after the operation is similar to what has been reported in other studies.^{9,11} Twenty (16.3%) patients who initially agreed for day case surgery were not willing for discharge. Seventeen (14%) patients were dissatisfied because day case surgery was costly.

All the investigations done as outpatients were charged and all the medicines were purchased by the patients. The patients coming from far-off places were staying in hotels. Many patients after discharge did not go home but stayed in hotels or private hospitals. After the operations, the patients had to travel in taxi or rented ambulances while in normal circumstances, they would have utilized a public transport. Therefore reduced cost of

surgery was achieved with increased financial burdening of the patients. Economic evaluation of day-case surgery is particularly important in Pakistan where patients are generally poor and resources are limited.

Forty one (33.6%) patients were not satisfied because of postoperative complications. Overall complication rates once the patient has returned home range between 1 to 13%.^{4,7,8,12} Twenty eight (23.7%) patients contacted a hospital, doctor or a dispenser in the early postoperative period, which is also higher than other studies. Studies by Buttery et al and Wilkinson et al showed that 9 and 3% patients respectively contacted their medical practitioner.^{8,12} A specific area of dissatisfaction is inadequate pain control after discharge with 48(23.7%) patients reported having severe pain. In a study by McHugh et al only 17% patients reported with severe pain while in a study by Hunter et al, 40% patients complained of severe pain.^{11,13} Ibuprofen was adequate in controlling pain in 93 (76%) patients. Only ten patients could be managed successfully at home by taking supplemented analgesics for severe pain while the rest 19 (15.5%) patients needed medical care. Seven (5.7%) patients were readmitted after discharge for various complications. This is higher than 2–3% reported readmission rates.² Hunter et al reported no readmissions while Bain et al reported 7.8% readmissions after day-case surgery^{11,9}. Six (5%) patients were admitted directly in the ward after surgery. This is higher than 2–3 % recommended direct admission rates.²

A large number of patients were satisfied with some areas of day-case surgery but their overall satisfaction rates were not high. This is because they were not familiar with this type of surgery and they felt neglected. Until recently, their friends or relatives were admitted in this hospital for 3-4 days for a similar procedure. Sixty two (51%) patients would prefer operation as in-patient next time, which is higher than other studies.^{4,11} Seventy four (61%) patients would prefer an overnight stay after the operation next time. This is a high figure compared to 4% and 30% reported in most series.^{8,11,12} This also indicates the reluctance of patients to undergo day-case surgery in our set up.

This study shows that overall patient satisfaction with Day-case surgery is not high in our set up. To increase the patients' satisfaction, it is important to inform the public about the development of this type of surgery. Day-case surgery units separate from routine work with independent staff should be set up. Patients should be properly selected and those who qualify for day-case surgery must be informed that there is no added risk attributable to day-case surgery. Arrangements can be made to carry out investigations free of cost like the inpatients. Facilities can be provided for some patients to stay overnight postoperatively. Improvement in these areas can result in some increase in satisfaction after day case surgery. In the meantime, short-stay surgery, that is admission 24 hours before surgery and discharge 24 hours after the operation is more suitable.

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