

Patient survey after inguinal hernia repair in ambulatory surgery

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We studied the patient charts of six women and 41 men who had undergone hernia repair in ambulatory surgery between February 1991 and March 1992, and sent a postal questionnaire to all 47 former patients. No major complications had occurred. The response rate was 92% ($n = 43$). We discovered that 95% of respondents felt that preoperative instructions had been adequate, but only 38% felt that they had received adequate postoperative information. Postoperative pain was considered to have been severe by 43%. Full activity had been resumed after an average of 28 days. Overall, 86% claimed to be satisfied, and 67% said that they would recommend hernia repair in ambulatory surgery to others. We conclude that hernia repair in ambulatory surgery can be performed safely. Nevertheless, more attention has to be paid to providing information for postoperative life rules and analgesia to enhance patient satisfaction.

Key words: Inguinal hernia repair, patient satisfaction, postoperative pain, postoperative information

Ambulatory surgery means that the patient is admitted and discharged from a facility on the day of operation¹. The idea of hospital day-case surgery is not new – Nicoll² first reported day surgery on paediatric patients in 1909 – but its modern development dates from the 1950s³. Although day-case surgery has been routinely practised for nearly 40 years, acceptance has been slow. Recent economic constraints and hospital bed shortages have stimulated the expansion of the practice⁴.

At the Maastricht University Hospital we started performing day-case inguinal hernia repair in adults in 1989. Today ambulatory surgery accounts for 26% of the 3027 surgical procedures performed annually in our department. Inguinal hernia repair forms an intermediate general surgical procedure for which a high proportion of patients are eligible for day-case surgery.

A study was carried out to evaluate the efficiency of inguinal hernia repair in ambulatory surgery. Surgical efficacy (concerning complications and readmittance) and the patient efficacy (with regard to postoperative pain, activity resumption and patient satisfaction) were examined.

Patients and methods

Between February 1991 and March 1992, 47 adult patients underwent elective inguinal hernia repair by means of a Bassini repair. The procedure was performed under general anaesthesia at the Maastricht University Hospital's day-case centre.

The 47 patients (six women and 41 men) had a mean age of 42 (range 18–73) years. The patients' charts were studied for readmittance rate and complications. We developed a questionnaire consisting of 19 questions.

We included questions about the patients' attitudes towards the information they had been given pre- and postoperatively, any postoperative discomfort they had felt, and analgesia use. We asked them how long it had been before they could go back to work and resume normal activities. The patients had to indicate their general feeling about hernia repair in ambulatory surgery on a scale from 1 (very bad) to 10 (excellent). In addition they were asked whether they would recommend ambulatory surgery to others. The questionnaire was sent to all 47 patients. Non-responders were sent one remainder.

Results

Anaesthesia and the hernia repair procedure had all been uneventful. All patients had been discharged on the same day as the operation, although one male patient had been readmitted the same night for severe wound pain. Two

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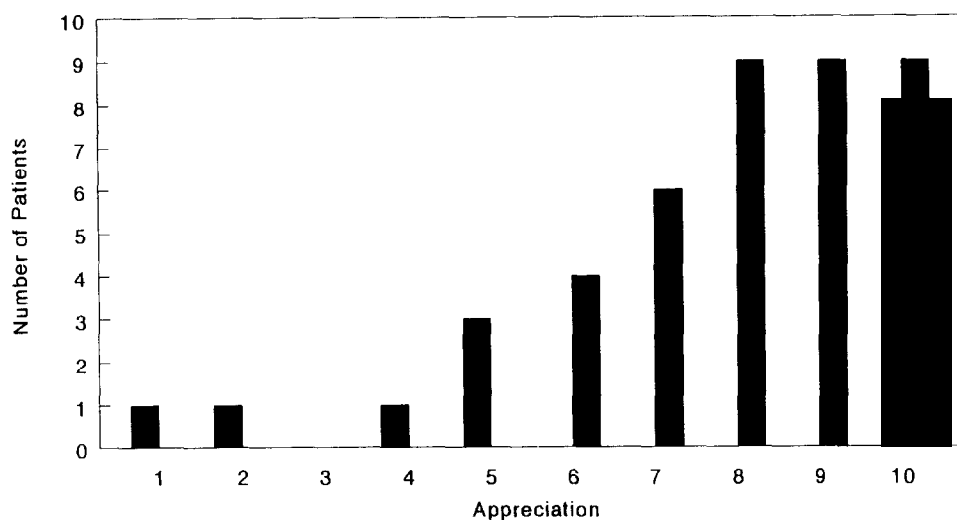


Figure 1. Patient satisfaction: ■; score 6 or higher: 86%.

other patients still suffer from mild inguinal haematoma. The follow-up was too short to detect recurrences.

A response rate of 92% (43/47) was obtained from the questionnaire. The preoperative information was reported to have been adequate by 37/43 (86%) of the patients, but the postoperative information was judged to have been sufficient by only 16/43 (38%). In particular, instructions about life rules (what patients may or may not do after the operation) were felt to be insufficient. Postoperative discomfort included wound pain in 35/43 (81%) and headache in 6/43 (14%) patients; and 15/43 (43%) of the patients felt that postoperative pain had been almost unbearable. Oral analgesia was used for an average of 2.5 days by 30/43 (70%) of the patients. 29/43 (67%) patients were active workers with paid jobs, and they resumed work after an average of 30 days. 11/43 (26%) had no paid jobs. Full activity was resumed after an average of 25 days in this group. Full activity resumption in both groups was achieved after an average of 28 days. (Three patients did not respond properly to this question.)

Thirty-seven out of forty-three (86%) patients were satisfied (score 6 or higher) with the hernia repair in ambulatory surgery (Figure 1). 29/43 (67%) of the patients said they would recommend ambulatory surgery to others. Reasons for not recommending it were postoperative pain or complications. Some mentioned that the surgeons had advocated ambulatory surgery and its possible benefits in an over-optimistic manner.

Discussion

The mere idea of ambulatory hernia surgery softens the emotional impact of the operation. The short hospital stay and temporary disruption of normal daily life can reduce disability and encourage the patient to resume activities after a short time⁵. As reported by Farquharson⁶ and Morgan and Beech³, ambulatory surgery does not increase risks or complications in hernia repair. In this study, only two patients had a postoperative haema-

toma and one had to be readmitted because of severe pain. However, postoperative pain was found to be a major concern of 43% of the patients, despite the use of oral analgesic by 70%. Postoperative pain affects the patient's appreciation. More attention should therefore be directed to adequate postoperative pain-relief by both surgeons and anaesthetists. Standard analgesia by paracetamol or comparable drugs may be insufficient after hernia repair.

Kirby and Skilton⁷ suggested that, apart from pain, uncertainty about the postoperative course was the main reason for the patient being reluctant to go home after a hernia repair. In this study, 62% of the patients were dissatisfied with the postoperative information received: i.e. concerning the expected postoperative discomfort and especially the life rules on what they may or may not do. The surgeon's visit after the operation is usually short and the patient has not recovered from anaesthesia sufficiently to comprehend the instructions fully. More attention has to be focused on this issue. Additional doctors' prescriptions or a phone call the day after the operation can be helpful.

Full activity resumption occurred after an average of 28 days. Cannon et al.⁸ found the mean time spent off work to be 52 days in this group of patients, despite the surgeon's advice to resume work within 28 days. Although one might expect that full activity resumption would be earlier after ambulatory surgery than after inpatient surgery, Michaels et al.⁹ found no difference in recovery time between inpatients and ambulatory patients. Furthermore, full activity resumption after an operation is possibly influenced more by cultural aspects and social pressures rather than by whether or not the surgery was ambulatory. The persons without paid jobs resumed full activity earlier than those with paid jobs. A possible explanation for this difference is that those with paid jobs can afford to wait until they are ready before resuming all their activities, while those without paid employment are more likely to start all their activities

gradually as their circumstances demand. More detailed questions are necessary to explain a possible difference.

In conclusion this study supports the belief that ambulatory hernia repair is a safe procedure. However, more attention should be directed to postoperative information and pain relief. This will enhance the patient's acceptance of ambulatory hernia repair.

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