

Direct access day-case hernia surgery: a logical option for reduction in waiting time

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Abstract

Introduction: Direct access day-case surgery is feasible in the management of symptomatic groin or para-umbilical hernia. With adequate coordination between the surgical team, GP and the patient, the average waiting time could be reduced without compromising quality of care.

Methods: A retrospective review of case notes of patients who underwent hernia repair, under the care of a single consultant surgeon was carried out. Between 1998 and 2002, a total of 427 patients had elective day-case hernia repair. Over this period 137 patients, who were chosen from the GP referral letter, underwent direct access day-case hernia surgery.

Results: Out of the 137 patients, 136 successfully underwent direct access day-case surgery. One patient was found to have no demonstrable hernia on the day of surgery and was discharged. The median waiting time for direct access hernia surgery was 69 days, less than half of those who were first seen in the clinic during the same period.

Conclusions: Current waiting time for elective day-case hernia surgery could be reduced significantly by direct access surgery. This seems to be the logical solution for reduction of waiting time without compromising the quality of patient care.

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Keywords: Direct access surgery; Waiting time

1. Introduction

Increasing caseload in the National Health Service (NHS) is generating longer waiting times, both for elective surgery and for an out-patient clinic appointment. A significant number of patients attending general surgical out-patient clinics are fit and have simple surgical conditions which present little diagnostic difficulty. The total waiting time for elective operation in this group of patients is the waiting time for an out-patient appointment added to the time between this appointment and surgery. Direct access surgery has been shown to save time and resources in the out-patient clinic [1]. For routine elective hernia repair, a general practitioner (GP) usually sends a referral letter to a consultant surgeon who

arranges a clinic appointment. The patient is then evaluated in the surgical clinic and, if found suitable, a day-case hernia repair is arranged. Following the out-patient visit, the patient makes a second visit to the pre-operative assessment clinic. Finally, they have a third visit to have their hernia operation. In our study, we examined the role of direct access day-case hernia surgery in reducing the overall waiting time.

2. Patients and methods

From 1998 onwards, all GP referral letters for elective hernia repair were screened by one consultant (H. R.-S.). Those with inguinal, femoral and para-umbilical hernias were included in the study. From the descriptions given in the GP letter, patients with symptomatic hernia were identified for direct access repair. Those with an uncomplicated hernia

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as described in the referral letter and likely to be American Society of Anaesthesiology grade I or II risk for general anaesthetic were offered direct access hernia surgery or an out-patient appointment. Once the patient was identified for direct access surgery, without prior clinic appointment, the GP and the patient were informed in writing. Patients were given the choice of a surgical out-patient clinic appointment if they had any issues to discuss or if they were not keen on direct access surgery. Patients were also given a choice to change the operation date to suit their convenience. Those with a recurrent hernia, a large hernia or at high risk for a general anaesthetic as described in the referral letter were invited for a routine clinic appointment first and then added onto the day-case waiting list as appropriate. If the referral letter was inconclusive the patient was invited to the clinic. All children were first seen in the out-patient clinic. All patients were evaluated in the pre-operative assessment clinic and assessed by a nurse practitioner on the week before their operation. On the day of surgery, all patients were examined and consented by the operating surgeon.

3. Results

Between 1998 and 2002, 427 patients underwent day-case hernia repair. Of these, 291 (68%) were first seen in the clinic and 137 (32%) were invited directly for day-case surgery. One patient in the direct access group did not have a demonstrable inguinal hernia and was excluded from the study. The age and sex distribution in both groups were comparable (Table 1). Inguinal hernia was the most common diagnosis in both the groups, which explains the small number of women in the direct access group. Femoral, para-umbilical and epigastric hernias were encountered in a small number of patients in each group (Table 2). Two patients in the clinic group had bilateral inguinal hernias and one in the direct access group. Eighteen patients in the clinic group had recurrent inguinal or para-umbilical hernias. Two of the direct access group were found to have a recurrent inguinal hernia, which was not specified in the referral letter. Their operations were carried out without any perioperative complications.

Table 1

	Clinic group (n = 291)	Direct access group (n = 136)
Mean age	39	44
Male:female	259:32	133:3

Table 2

Operative diagnosis	Clinic group (n = 291)	Direct access group (n = 136)
Inguinal	224	133
Femoral	1	1
Para-umbilical/epigastric	66	2

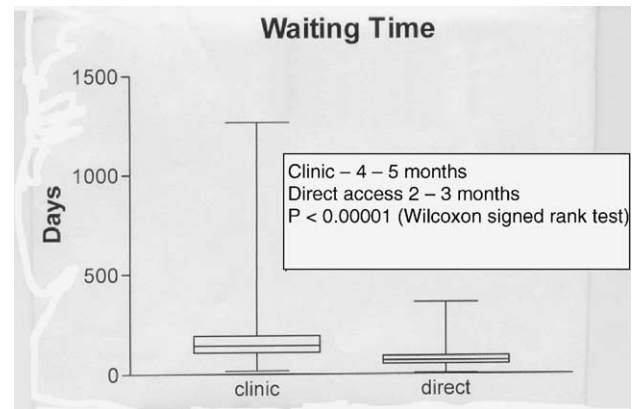


Fig. 1. Box plot shows the median (horizontal line within the box). Lower and upper margins of the box indicate the first (25%) and third (75%) quartiles, respectively. Lower and upper ends of the vertical line correspond to the minimum and maximum values (range).

The median waiting time for the patients in the clinic group to be seen in the routine surgical clinic was 83 days. They waited a further 57 days before having their operation. (Total median waiting time = 142 days.) Median waiting time in the direct access group was 69 days. ($P < 0.0001$ Wilcoxon Signed Rank Test, Prism software; Fig. 1.) None of the patients in either group required unanticipated hospital admission following the day-case surgery. One patient in the clinic group was readmitted a few days after operation, for evacuation of haematoma. There were no other major complications in either group. Five patients in each group had a minor wound infection, which was managed by the GP. There was no mortality in either group.

4. Discussion

Waiting time for an operation includes the time spent waiting for the out-patient appointment in addition to the actual waiting time for admission to the hospital to undergo the proposed operation. In our series, the median waiting time for an out-patient appointment was 83 days but during the period of the study the waiting time rose from 10 weeks before up to 26 weeks after the introduction of the “2 week rule” for cancer referrals. This is an unfortunate, but not an unexpected, result of the introduction of this guideline. About two-thirds of the total waiting time for this group of patients was in waiting for a clinic appointment. We have seen a greater improvement in access time than would be seen in the average department where only one-third of the total waiting time is spent waiting for an out-patient appointment [2]. Direct access surgery appointments have allowed other patients to be seen in the out-patient department, as the total number of patients seen in each out-patient clinic has not changed over the study period or since. In our study, this corresponds to 137 patient slots in a 4-year period (the number of patients who underwent direct access repair). Direct access service has been used successfully by various

specialities such as direct access gastroscopy by gastroenterologists [3], tonsillectomy by ENT surgeons [4] and oral surgery by the dentists [5]. In all specialities, the procedure to be performed is relatively simple and usually uncomplicated with a predictable outcome. Establishment of centralised services would enable the patient to be operated in any available list irrespective of the speciality, thus reducing the waiting time for high-volume routine surgical procedures [6].

One potential downside of “missing a clinic appointment” is the decreased interaction between the patient and the surgeon with only a short encounter preoperatively on the day of surgery. However, the patient is first counselled by their GP, then by the nurse at the pre-operative assessment clinic and, finally, by the surgeon on the day of operation. Although a formal audit was not carried out, none of our patients in the direct access group expressed any concerns and were happy about the shortened waiting time. It must be emphasised that the patient still retains the choice to have a formal out-patient appointment if they so wish. Approximately, three quarters of patients in this study were still seen in the conventional manner in the clinic and hence there was no major loss in the potential educational value. No patients were invited for routine follow up after surgery but a small number did return after initial consultation with their GP. We have now introduced online referral for direct access surgery to further shorten the referral time.

5. Note

This data was presented at the Annual Audit Symposium, Royal College of Surgeons of Edinburgh, March 2003, Annual Scientific Meeting of the Association of Surgeons of Great Britain and Ireland, May 2003 and as a poster at the Annual International Hernia Congress, London, June 2003. An abstract was published in *British Journal of Surgery*, vol. 90 (Suppl 1), June 2003.

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