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## Folly! The long distance day surgery patient

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The aims of this study were to assess the morbidity and satisfaction in long distance day surgery patients undergoing surgical intervention for male infertility. The results showed that, with a well-motivated patient group, increasing distance travelled do not cause an increase in postoperative morbidity, providing that patients receive adequate community support and information regarding their surgery, limitations on activity, potential complications and methods of analgesia.

Key words: Day surgery, long distance patients

### Introduction

Guidelines for travelling time and distance from the day surgery unit (DSU) to the patient's home base is rather arbitrary (1 h and 30 km, respectively), and does not take into account the physical, intellectual and ASA status of the patient, the type of surgery performed and the community support structure as well as the type and conditions of transport. A Norwegian study<sup>1</sup> showed that the social situation is probably more important than the distance itself, and that patients are willing to travel 150–200 km provided that they feel that the treatment and care they receive is good enough. In fact 35% and 4.5% of patients travelled distances exceeding 100 km and 200 km, respectively, and this often involved speed boat and ferry transport. Our DSU is a tertiary referral centre for surgical intervention of male infertility. This is viewed as a low priority surgical procedure, and hospital economics preclude inpatient stay. Patients are predominantly extra-contractual referrals and are highly motivated towards day surgery for their own financial reasons. Our DSU general audit showed that the principal causes of recovery delays, which may reflect later morbidity and admissions, are haemorrhage, pain, syncope and nausea and vomiting, and are potentially resolvable with the right approach.

### Methods

We reviewed all patients undergoing scrotal surgery who lived outside London postal districts over a 3-yr period. A consultant surgeon and consultant anaesthetist were regularly assigned to the list. Patients with a history of postoperative nausea and vomiting or motion sickness were given prophylactic anti-emetic therapy in accord with our unit protocol. Pain relief

combined local and regional techniques with local anaesthetic agents and non-steroidal anti-inflammatory drugs (NSAIDs). We sent out patient questionnaires focusing on morbidity and patient satisfaction.

Patients were specifically questioned on problems with nausea, vomiting and pain prior to discharge from the DSU and during the journey home. The distances travelled by the patients and their mode of transport were ascertained, and their opinion as to the influence of journey length on the nausea and pain. Any difficulties recruiting an escort were also enquired after. Analgesic requirements in this group of patients were correlated with a group of patients from our general day surgery audit. Availability and usage of professional help postoperatively at home were included in the questionnaire.

### Results

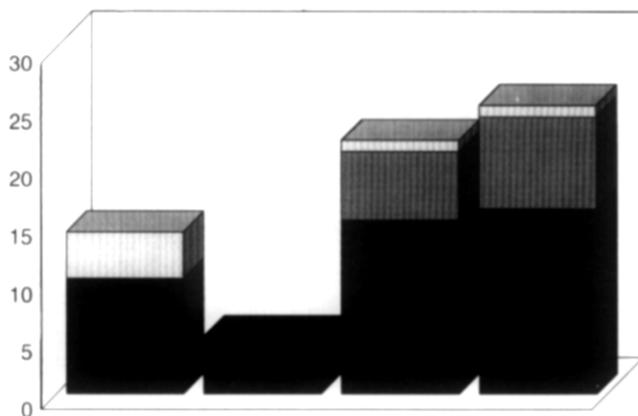
One hundred and ten questionnaires were sent out and 59 patients replied, either by returning the questionnaire or by telephone follow-up. A higher response rate was not achieved for several reasons; the retrospective nature of the study over a 3-yr period meant that some patients had moved, some phone numbers were ex-directory or disconnected, and the incorrect address may have been entered on the patient's file.

All patients had travelled for over the 1 h recommended in day surgery guidelines. Only five had problems recruiting an escort for the day. Seventeen declared that the escort was worried, the usual concerns being driving in London and looking after a postoperative patient, and potential nausea and pain on the journey home. Travelling times were as follows: 1–2 h, 28; 2–3 h, 17; 3–4 h, 11; and over 4 h, 2.

The range of distance was 25–340 miles, apart from one patient who flew the 8000 miles to Hong Kong. Modes of transport included: car, 29; train, 27; coach, 1; and aeroplane, 2.

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**Figure 1** Incidence of nausea and pain in recovery area and on the journey home. □ severe; ▒ moderate; ■ mild.

We divided morbidity data into problems prior to discharge from the DSU and on the journey home. Fourteen patients (23%) experienced nausea prior to discharge; in 10 of them it was only mild, but in four it was quite severe, with two of these being delayed in recovery but subsequently being discharged with no nausea. Five patients who experienced nausea in the recovery phase (two severe and three mild) went on to experience nausea on the way home, and three of them felt that their journey contributed to this.

Postoperative pain was more common, with 22 patients (37%) complaining of pain in the DSU; 15 mild; six moderate and one severe. Thirty-seven patients had no pain while still in hospital; 25 patients (42%) had some pain on the way home; 15 mild discomfort, eight moderate and the same one patient who described severe pain (Figure 1). Eleven of these patients felt that their journey contributed to their pain and seven of these were patients with a journey time >2 h; 34 patients had no pain on the way home. Despite the apparently high incidence of some pain, all patients expressed satisfaction with their treatment on the day of surgery, and all felt that they had been discharged with sufficient painkillers.

Only two patients felt their general practitioner was uninformed of their operation, and did not know who to contact if they had any problems postoperatively at home. Eight patients visited their general practitioner in the first week postoperatively.

## Discussion

Our study raises a few questions with respect to day case surgery, especially if long distances are involved. First, it would seem apparent that patients are willing to travel longer distances for their surgery and have little difficulty recruiting an escort to look after them. Patients can arrange complex travel arrangements, e.g. car–train–taxi to travel home. We concentrated on the time taken to get home as this would seem to be most important; a relatively short distance in slow-moving traffic may take the same time as a longer train journey and potentially in less comfortable surroundings. It must be remembered though that our group of patients are highly motivated as they have been referred, often after procedures at their local hospital, for further surgical intervention for infertility.

In our group of patients nausea was not a significant problem, but it could be quite a barrier to long distance travel. The group of patients who experience nausea in the primary and secondary phases of recovery may represent a group that should be given prophylactic ondansetron prior to discharge from hospital.

Analgesia in our group correlated with the figures found in our general day surgery audit, and it seems apparent that patients will declare that they had some pain, but for a variety of reasons did not request or self-administer analgesia. This does not mean that we should be complacent about the level of analgesia achieved. We should continue to endeavour to ensure that all patients are pain free where possible before leaving the DSU.

However, all the patients expressed satisfaction with their treatment (perhaps biased by their motivation to have surgery). Therefore, with sufficient community support, i.e. good communication with the patient's general practitioner, and adequate information and education given to the patient and their escort with regards to their surgery, limitations on activity, potential complications and methods of analgesia, then the distance travelled by the patient should not be a barrier to receiving their treatment as a day stay patient.

## Reference

- 1 Nygaard B. Are travelling distances a barrier to day surgery? 1. *Day Surgery in the World. Proc. 1st Int. Cong. Amb. Surg.* 1995