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### Summary

Although day case surgery is recommended, its widespread feasibility in an urban environment is unclear. We studied 100 consecutive unselected patients admitted for surgical procedures considered to be suitable for day case surgery. Their age, fitness and social details were recorded and they were asked both before surgery and after discharge by a postal questionnaire, whether they would have preferred treatment as an outpatient.

There were 47 men and 53 women with a mean age of 42.5 years. Ninety-six were considered to be medically fit for day case surgery but 10 patients lived alone, seven had no suitable companion, 22 had too many stairs to climb, 13 lived too far from the hospital and two could not provide a lift home. Thus 58 of the patients were unsuitable for day case surgery. Seventyeight of the patients replied to the postal questionnaire. Before the operation 51 patients preferred the idea of day care but only 14 felt the same way afterwards. The single postoperative complication was one case of acute retention after a hernia repair.

In our experience, over half the patients initially deemed suitable for day case surgery would be unsuitable.

# Introduction

The Royal College of Surgeons Commission on the Provision of Surgical Services published in 1985, outlined guidelines suggesting that a wide range of conditions are suitable for day case surgery<sup>1</sup>, and it is generally considered to be used insufficiently<sup>2</sup>. The feasibility of following these recommendations in central London teaching hospitals was questioned because many patients come from long distances for treatment and because the local population tend to be elderly, poorly housed and ill-provided with social services<sup>3</sup>. This survey was therefore undertaken to explore the practical aspects of treating these patients as day cases.

# **Patients and methods**

One hundred consecutive unselected patients admitted as inpatients under one general surgical firm for routine surgical procedures included in the Royal College of Surgeons day case list were studied prospectively with a view to judging whether treatment as a day case would be feasible. Their ages, diagnoses, American Society of Anaesthesiologists (ASA) Grade and social details were recorded. The presence of another person at home, the age and fitness of their cohabitee, the numbers of flights of stairs needed to be climbed and the availability of a lift were noted. They were asked whether they could be collected from hospital. They were asked to assess their general practitioner (if they had one) and whether they had access to a practice nurse. Before their operation they were asked whether, if they had the option, they would prefer day case to inpatient surgery and the same question was asked by postal questionnaire 4-6 weeks after discharge. At the time of the study no general anaesthesia day case surgery was being performed by our unit.

#### Results

Forty-seven men and 53 women, mean age  $42.5\pm18.9$  (mean $\pm$ s.d.) with a range from 8-84 years were studied. Their diagnoses are given in Table 1. Seventy-five had an ASA grade of 1, 21 of 2, and 4 of 3.

Ninety-eight of the patients had a general practitioner, 27 of whom the patients judged to be 'excellent', 55 'good', 12 'moderate', three 'didn't know' and one thought the general practitioner was 'bad'. Forty-six had nurses attached to their practice, 43 did not and nine didn't know.

Eighty-five patients lived with someone, 78 of whom were considered by the patient to be capable of looking after them: seven were not. Fifteen patients lived alone, but five of these could have found a friend or relative to stay with.

All patients lived in satisfactory accommodation (ie a house or flat). Sixty-three had no stairs or only one flight of stairs to climb usually within a house but 27 had two or three flights to climb of whom 20 had no lift. Ten had 4-16 flights to climb, two without a lift.

Fourteen patients lived outside London, and two patients could not have found transport home.

On the basis of the above data, 58 patients were considered on objective criteria to be unsuitable for

Table 1. Operations performed

| Unilateral inguinal hernia repair                  | 21  |
|--|-----|
| Other herniae                                      | 10  |
| Breast lump excision                               | 20  |
| Unilateral excision of varicose veins              | 19  |
| Bilateral and recurrent excision of varicose veins | 7   |
| Lymph node biopsy                                  | 6   |
| Circumcision                                       | 4   |
| Miscellaneous (eg thyroglossal cyst, ganglion)     | 14  |
| Total  | 101 |

NB, one patient had two operations

Table 2. Patients unsuitable for day case surgery

| Too many stairs (without a lift)                     | 22   |  |
|--|--|--|
| Distance from hospital                               | 13   |  |
| Lived alone  | 10   |  |
| Unsuitable companion<br>ASA grade 3                  | 7 0141-0768/89<br>3 120735-02/ <b>\$</b> 0 |  |
| No transport<br>Distance from hospital & ASA grade 3 | 2 ©1989<br>1 The Royal                     |  |
| Total  | 58 Society of<br>Medicine                  |  |

Paper read to Section of Surgery, 11 March 1989 Table 3. Patients preference for day case or inpatient surgery

|                           |    | Postoperat |                                |          |
|---------------------------|----|------------|--------------------------------|----------|
| Preoperative              |    | •          | Preferred<br>inpatient<br>care | No reply |
| Preferred day             |    | -          |                                |          |
| case surgery<br>Preferred | 51 | 14         | 28                             | 9        |
| inpatient care            | 34 | 1          | 27                             | 6        |
| Didn't know               | 14 | 1          | 6                              | 7        |

day case surgery. The reason in each case is given in Table 2.

The patients' subjective view as to whether or not they would prefer day case surgery is shown in Table 3. There were 51 patients who initially would have preferred it but this fell to only 14 when they looked back on the experience of surgery. Only two in the other groups changed their mind. Twenty-two patients did not reply to their follow-up questionnaire.

The total number of days spent in hospital by these 100 patients were 229.

One patient developed acute retention after a hernia repair. There were no other complications.

# Discussion

The concept of day case surgery has been widely discussed<sup>1-4</sup>. It has some clear advantages; many patients prefer it but in the NHS the main incentives are related to cost and 'productivity' rather than optimal care of the patients. It has been pointed out, however, that because there is no shortage of work in the NHS, increasing day surgery does not necessarily result in a reduction in inpatient bed usage<sup>5</sup>.

The disadvantages of day case surgery are discomfort, inconvenience, anxiety and perhaps danger to the patient. In an overstretched NHS although we should use day case surgery as widely as is feasible<sup>6</sup>, we must inevitably be cautious before accepting it as ideal. The complications actually experienced by these patients are not evidence for limiting day care surgery. However, in terms of the aims of the recent White Paper to increase the customers' satisfaction with the service, it is relevant to note that having experienced inpatient surgery only 16% of our patients would on reflection have preferred to have been treated as a day case. This number may have increased however, if given adequate psychological preparation.

In a study from Edinburgh<sup>7</sup>, 26% of patients were excluded from a trial comparing inpatient to day case surgery. These patients were considered to be unsuitable for reasons similar to our study. Of the remainder who took part in the trial, there was an impression that day surgery was the most acceptable. They report a high incidence of complications (36%), although most of these were trivial and some may have occurred after our patients would have gone home.

Our study has clearly shown that nearly 60% of a group of 100 consecutive patients theoretically suitable for surgery as day cases would have been less than ideal for it in the current environment of inner city practice.

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