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## Day surgery dilatation and curettage: patients' experiences

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The purpose of this study was to describe the quality of care received by day case dilatation and curettage (D&C) patients. Data were collected by mailed, self-completed questionnaire administered to consecutive patients undergoing D&C in 35 NHS hospitals. The results from these questionnaires were used to assess satisfaction with the process of care, use of post-discharge services, rate of complications, effectiveness of operation, speed of recovery and overall satisfaction of the patients. The results showed that day case patients were very satisfied with the care they received from doctors and nurses. The majority of day case patients received information before and during their stay. The most common postoperative complication was bleeding, which affected 38% of day cases. We were able to conclude that performing D&C as day surgery is acceptable to patients and day surgery is an appropriate setting for this procedure.

Key words: Day surgery, dilatation and curettage, patient satisfaction

### Introduction

Dilatation and curettage (D&C), a common minor gynaecological procedure used in the management of menstrual bleeding, has been identified as suitable for day surgery<sup>1</sup>. However, the proportion of cases actually performed on a day case basis varies widely. One British study<sup>2</sup> showed that the proportion performed as day cases in the eight health districts of the Oxford region varied almost four-fold, from 22-81%. Whereas some of the variation may have been related to differences in the availability of facilities, surgeons' concerns about the appropriateness of the procedure for day surgery and lack of information about patients' preferences may constitute additional barriers to the adoption of day surgery D&C.

This study addresses these issues, and reports on women's experiences of day surgery D&C in order to examine its acceptability.

### Methods

The development of the questionnaire to assess patients' experiences of surgery has been described elsewhere<sup>3</sup>. Briefly, it was either given, together with a stamped addressed envelope, to the patient on discharge to be

completed and returned 3 weeks later, or was mailed to the patient 3 weeks after discharge. The actual method of carrying out the survey varied from hospital to hospital due to organizational differences. However, recommendations were made to each hospital about procedures to maximize response rate by following up non-responders: this resulted in an average response rate across all hospitals of 60%. Specially written software allowed patients' data to be entered by hospital staff. A copy of the local database could also be sent for inclusion in a national comparative database<sup>4</sup>. The current study used this aggregate database, which at the time of analysis contained data from 35 NHS hospitals in the UK. From this, all patients undergoing D&C were selected to produce a sample for analysis of 583 day cases.

The questionnaire responses of patients who had undergone D&C as a day case procedure were summarized to examine the quality of care provided to these patients in the areas of: (i) in-hospital care (attitude and availability of doctors and nurses, provision of information); (ii) post-discharge care (medical and lay care); (iii) complications; (iv) effectiveness (changes in symptoms, changes in day-to-day life, speed of recovery); and (v) overall satisfaction. Column percentages in some tables sum to less than 100% as 'Not applicable' answers given by patients are not shown.

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**Table 1.** Age distribution of day case patients and inpatients

Age group (yr)	Day cases	
	n	%
15-34	86	14.8
35-54	429	74.0
55-74	65	11.2

## Results

### Age

The majority of this group of patients (74%) were aged between 35 and 54 yr at the time of the operation.

### In-hospital care

High levels of satisfaction were reported by day case patients with the attitude of and availability of help from medical staff. The level of satisfaction with nurses was higher than that with doctors.

Most day cases (over 80%) had been given an explanation of their treatment both before and during their hospital stay. In contrast, only 60% (SE 2.0) had been given written information before admission and just under half (49.2%, SE 2.1) had been given written information during their stay.

### Post-discharge care

One area of concern about the use of day surgery centres on patients' use of services after discharge from hospital. One particular worry is that day surgery simply shifts the burden from the hospital to primary and community care. The most common provider of formal care to day case patients was the general practitioner (GP), who had been seen by almost a third of patients during the 3 weeks since discharge. The next most common source was the hospital outpatients' department which had been attended by approx. one in 10 patients, whereas the use of other services was reported by only a small proportion of patients. In addition, a significant amount of care was provided by lay carers: about a third of women had 'quite a lot' or 'a great deal' of help from friends, family or neighbours after leaving hospital.

**Table 2.** Number and percentage of patients satisfied with the attitude of and availability of help from doctors and nurses by patient group

	Day cases		
	n	%	SE
Attitude of nurses	569	97.6	0.6
Attitude of doctors	519	89.0	1.3
Availability of help from nurses	565	96.9	0.7
Availability of help from doctors	470	80.6	1.6
	470	80.6	1.6

**Table 3.** Number and percentage of patients given information about their treatment at different stages of their care by patient group

	Day cases		
	n	%	SE
Given explanation before admission	479	82.2	1.6
Given written info. before admission	351	60.2	2.0
Given explanation during hospital stay	520	89.2	1.3
Given written info. during hospital stay	287	49.2	2.1

### Complications

Not surprisingly, the most common complication reported by day case patients was bleeding, reported by more than one-third of all patients. About 7% (SE 1.0) of patients reported other complications. These included backache, stomach pain and weakness. A small minority of patients reported postoperative infection and an allergy or drug reaction.

About one in 10 patients complained of a 'fair amount' or 'a great deal' of pain during the first 24 h. However, only 2.8% (SE 0.7) of patients went on to report that pain control was an unsatisfactory aspect of their care, suggesting that they did not perceive that anything more could be done to control their pain.

### Effectiveness

A large proportion (42.7%, SE 2.1) of patients felt that it was too soon to say whether or not their symptoms had changed.

About a fifth of patients stayed in bed for a day or more and about two-thirds stayed indoors for 1 or more days. Three weeks after surgery fewer than 10% of patients had difficulty with bathing, going upstairs and shopping. About two-thirds of patients felt that the actual speed of recovery had been about as they had expected (63.5%, SE = 2.0).

### Overall satisfaction

Overall satisfaction was high – 86.6% of patients (SE 1.41) would recommend day surgery to a friend in a similar situation.

**Table 4.** Number and percentage of patients using formal and lay care after discharge by patient group

	Day cases		
	n	%	SE
GP	177	30.4	1.9
Practice nurse	12	2.1	0.6
Hospital outpatients	61	10.5	1.3
District nurse	2	0.3	0.2
'Great deal' or 'quite a lot' of extra help from family/friends	188	32.2	1.9

**Table 5.** Number and percentage of patients reporting postoperative complications by patient group

	Day cases		SE
	n	%	
Infection/discharge	12	2.1	0.6
Allergy/drug reaction	5	0.9	0.4
Other complication	39	6.7	1.0
Bleeding	224	38.4	2.0
Fair amount/great deal of pain	65	11.2	1.3
Readmission	14	2.4	0.6

**Table 6.** Number and percentage of patients reporting changes in their symptoms since leaving hospital by patient group

	Day cases		SE
	n	%	
Better	129	22.1	1.7
No change	120	20.6	1.7
Worse	24	4.1	0.8
Too soon to say	249	42.7	2.1

Approximately 10% of both groups gave no answer.

## Discussion

The primary objective of this paper was to describe the experiences of D&C patients. Based on this sample, they were satisfied with their interactions with medical staff (a common finding in such surveys), and the majority had received an explanation of their operation both before and during their stay in hospital. A smaller proportion had also been given written information regarding their operation. Postoperative complications were experienced by a significant minority of patients: a third suffered bleeding and one in 10 complained of significant pain. After discharge about a third saw their GP in relation to the operation and about the same proportion required help from family or friends.

Increasing the use of day surgery necessitates demonstrating that it is both acceptable to patients and that it does not result in a reduced quality of care. Overall satisfaction was high in this group of D&C day surgery patients, as was satisfaction with medical staff. The behaviour of medical staff is one of the most important predictors of patient satisfaction<sup>5</sup>.

**Table 7.** Number and percentage of patients who still experienced limitations in their daily life 3 weeks after surgery, by patient group

Effect of operation	Day cases		SE
	n	%	
Difficulty bathing	6	1.0	0.4
Difficulty going upstairs	14	2.4	0.6
Difficulty shopping	38	6.5	1.0
Difficulty lifting heavy objects	66	11.3	1.3
Staying in bed 1+ days	125	21.4	1.7
Stayed indoors 1+ days	396	66.2	2.0
Took it easy 1+ days	508	87.1	1.4

Information provision to day surgery patients was good. A large minority of patients however reported significant levels of pain, which may affect use of post-discharge services: compliance with follow-up visits has been shown to be significantly related to pain control for vaginally performed gynaecological procedures<sup>6</sup>.

The Royal College of Surgeons' guidelines<sup>7</sup> indicate that patients should not expect an immediate resumption of normal life after minor surgery. Day case patients do appear to compensate for their shorter stay in hospital by staying indoors and in bed at home after discharge.

Concern has been expressed about the economic consequences of transferring procedures to a day surgery setting, as savings to the hospital may be offset by increases in costs due to an increase in complications and to an increased use of primary and community services by day case patients. However, neither the complication rate nor the use of formal services were found to be high in this study, possibly as a consequence of careful day case patient selection.

A second concern is that an increased rate of day surgery is achieved at some cost to the patient, through a slower recovery and increased need for lay care. It is difficult to examine this issue without a matched group of inpatients for comparison. However, *post-hoc* analysis of the national comparative data shows that the proportion of day case patients reporting the need for lay care is similar to that for inpatients undergoing D&C selected from the same database. A total of 32.2% of day case patients reported significant extra help from family/friends compared to 39.2% of inpatients, a non-significant difference. (The age distributions of the two patient groups are similar.) This suggests that day surgery need not result in an increased need for lay care following D&C.

Criticism has been directed at the high levels of D&C in the UK and at the inappropriate use of diagnostic D&C<sup>2,8,9</sup>. This study was only able to address the issue of whether or not day surgery is an appropriate setting for this technique, a relevant question given that while the debate over the use of D&C continues, it will still be carried out though perhaps at a lower rate. Patients were satisfied with day surgery D&C and the quality of the service appears to be high.

Several caveats remain regarding the interpretation of these results. The first is that given the response rate (60%) the results may represent the experiences of a self-selected group of either satisfied or dissatisfied patients. However, the overall satisfaction rate is comparable to that found in similar surveys<sup>10-12</sup>. The possibility also remains that recruitment bias may exist. Because of the nature of this study it was not possible to control the survey methods used by individual hospitals strictly. Though recommendations were made, they may not have been followed in all hospitals. It is obviously important that hospitals undertaking such surveys follow strict guidelines regarding the administration of questionnaires and follow-up of non-responders, in order to ensure accurate interpretation of results.

In summary, day surgery is an appropriate setting for D&C: overall satisfaction is higher than with inpatient care for the same procedure. Studies of day case patients undergoing clip sterilization, tubal diathermy and non-laparoscopic gynaecological operations have reported that up to 30% regard their stay as too short<sup>13-15</sup> and it has been reported that a small proportion of patients find obstetric and gynaecological procedures generally traumatic<sup>16</sup>. D&C does not appear to share these characteristics.

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