Changes in the surgical management of early breast cancer in England

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Summary
A questionnaire survey of consultant surgeons in England indicates that there has been a considerable change in opinion over the past few years concerning the management of early breast cancer; only 39.1% would now perform mastectomy, whereas 64.4% would perform conservative surgery. The most common forms of management are simple mastectomy and axillary clearance (21.9%); wide excision, axillary clearance plus radiotherapy (20.1%); and wide excision plus radiotherapy alone (16.9%). The majority of the surgeons would offer patients a choice of surgery, but only 52% had access to a breast care nurse.

Introduction
A survey carried out in 1983 showed that simple mastectomy was the most commonly performed operation for breast cancer in Great Britain, only 18% of surgeons undertook conservative surgery[1]. In 1985, it was reported that 5 year survival and disease-free interval were similar for both simple mastectomy and axillary clearance, and wide excision and axillary clearance followed by radiotherapy to the breast[2]. There is, therefore, a choice of treatment available for some patients with early breast cancer, and there are arguments in favour of women's participation in treatment decisions[3]. As part of a study[4] investigating the effect of patient choice of surgery for early breast cancer on preoperative and postoperative psychological adjustment, a questionnaire survey of the surgical management of early breast cancer in England was conducted in June 1986 to ascertain the type of surgery performed for early breast cancer, the extent to which surgeons would offer patients a choice of surgery and the availability of breast care nurses.

Method
A questionnaire was designed to establish information about the following:

(1) the numbers of early breast cancer patients treated in 1984 and 1985;
(2) the extent to which surgeons believed that local treatment affected outcome;
(3) the preferred form of surgery for a 40-year-old patient with a T1/2N0M0 tumour in the upper outer breast quadrant;
(4) the extent to which patients were offered a choice of surgery;
(5) the extent to which written information was supplied to patients offered a choice of surgery;
(6) breast reconstruction;
(7) the availability of breast care nurses and cancer counsellors;
(8) the average amount of time spent with breast cancer patients in a National Health Service clinic.

The questionnaire was sent to 609 consultant surgeons in England who were listed as Fellows in the 1985 handbook of the Association of Surgeons of Great Britain and Ireland.

Results
Response to questionnaire
Of the 609 mailed, 375 questionnaires were returned which reflected a response rate of 62%. Of these, 38 did not treat breast cancer patients, 24 had retired, 9 refused to complete the questionnaire, 9 were unknown at the address listed, 5 had gone abroad, and 3 had died. Thus the results of the survey are based upon the 287 surgeons (47%) who replied stating that they treated breast cancer patients.

Numbers of patients treated
A total of 9416 new patients were seen in 1984, and 9750 in 1985. The range of early breast cancer patients seen in 1984 was 0-286, with a median of 25 and, in 1985, the range was 3-321, also with a median of 25 (n=260). The majority of the surgeons saw less than 50 patients annually, suggesting that most breast cancer patients were seen in a general surgical clinic. Only 21.4% of the surgeons treated more than 50 breast cancer patients in 1984, and 22.2% in 1985.

Surgical treatment
The surgical treatment recommended for a 40-year-old patient with a T1/2N0M0 tumour in the upper outer breast quadrant is shown in Table 1. Surgeons could endorse more than one treatment option.

Overall, the results indicated that 43% of the surgeons would perform mastectomy with or without axillary staging (sampling or clearance), and 66%

Table 1. Treatment recommended for a T1/2N0M0 tumour in the upper outer breast quadrant (n=286)●

	Simple mastectomy		*Wide excision*	
	(n)	*(%)*	*(n)*	*(%)*
alone	27	9	21	7
+axillary clearance	68	24	27	9
+AC & radiotherapy	8	3	57	20
+axillary sampling (AS)	19	7	9	3
+AS & radiotherapy	—	—	22	8
+radiotherapy	—	—	53	18
Total	122	43	189	65

●Surgeons could endorse more than one treatment option

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would perform conservative surgery with or without axillary staging. Furthermore, 61% (115) of those surgeons who would perform conservative surgery would also undertake axillary staging, and 70% (132) would recommend breast radiotherapy with or without axillary staging.

The factors which influenced the surgeon's (n=286) decision concerning treatment included: metastases (92%), size of the tumour (91%), age (81%), site of the tumour (78%), size of the breast (61%), patients' wishes (13%), and marital status (11%).

The percentage of surgeons who believed that local treatment affected local recurrence, survival and patients' morale is shown in Table 2.

The data show that the majority of the surgeons believed local treatment affected local recurrence and patients' morale in most cases, but survival in very few cases.

Breast reconstruction

The majority of surgeons did not discuss the possibility of breast reconstruction either preoperatively or postoperatively (Table 3). Criteria used for offering breast reconstruction (n=245) included: stage of disease (55%), age (51%), time since surgery (48%), size of breasts (29%), patients' wishes (27%), marital status (12%), and the patients' emotional state (9%).

Choice of surgery

The majority of surgeons offered patients the choice of surgery on some occasion (Table 4).

The average time spent with breast cancer patients in a National Health Service clinic by those surgeons who would offer patients the choice of surgery in every/most cases (n=178) was as follows: 34%, 5-10 min; 26%, 11-20 min; and 39% stated that the time spent varied according to patients' needs. Additionally, 27% (n=163) felt they never/in very few cases had as long as they would like with patients, 3% felt they had as long as they would like in some cases, and 70% in most/every case.

Further analyses revealed that the amount of time spent with patients did not depend upon the extent to which surgeons offered a choice of surgery.

The majority of the surgeons who offered patients the choice of surgery in every/most case(s) did *not* provide supporting written information (Table 5). Where written information was given, details were provided about the operation (91%), the length of time in hospital (71%), side effects of radiotherapy (63%), breast reconstruction (54%), and the duration of radiotherapy (46%).

Availability of breast care nurse and/or cancer counsellor

Forty-eight per cent of the surgeons did not have a breast care nurse and/or a cancer counsellor employed in their hospital (Table 6).

Of those surgeons who would offer patients the choice of surgery in most/every case, *and* who had access to a breast care nurse and/or a cancer counsellor (n=92), 77% would never provide written information about treatment options, 15% would do so in very few cases, 1% would in some cases, and only 6% would in most cases.

Further analyses revealed that only 28% of the surgeons without a breast care nurse and/or a cancer counsellor would like such a person employed in their hospital. The reasons given included a belief that counselling should be done by medical or nursing staff on the ward (26%), that the liaison should be between the surgeon and the patient alone (31%), that

Table 2. The extent to which surgeons believed local treatment affected outcome

	Local treatment affects					
	Local recurrence		*Survival*		*Patients' morale*	
	(n)	*(%)*	*(n)*	*(%)*	*(n)*	*(%)*
Every case	24	8	4	1	71	25
Most cases	195	69	47	17	176	63
Some cases	5	2	8	3	5	2
Very few cases	57	20	197	71	28	10
Never	1	0	23	8	1	0
Total	282	99	279	100	281	100

Table 3. Percentage of surgeons who would discuss breast reconstruction when mastectomy is the preferred form of treatment

Timing	Every case	Most cases	Some cases	Very few cases	Never
Preoperatively (n=267)	6	31	4	48	9
Postoperatively (n=244)	5	26	4	57	4

Table 4. The extent to which surgeons would offer patients a choice of surgery

	n	*%*
In every case	33	12
In most cases	145	51
In some cases	7	2
In very few cases	86	30
Never	14	5
Total	285	100

Table 5. The extent to which written information is provided by surgeons who offer patients the choice of surgery in most/every case

	n	*%*
Never	132	74
In very few cases	34	19
In some cases	3	2
In most cases	9	5
Total	178	100

Table 6. Availability of breast care nurse and/or cancer counsellor to surgeons who offer patients the choice of surgery in most/every case

	n	*%*
No	84	47
Don't know	1	1
Yes	92	52
Total	177	100

Table 7. The percentage of surgeons who considered it important to consider patients' emotional needs

	In every case		*In most cases*		*In some cases*		*In very few cases*		*Never*	
	(n)	*(%)*	*(n)*	*(%)*	*(n)*	*(%)*	*(n)*	*(%)*	*(n)*	*(%)*
Preoperatively (n=281)	231	82	42	15	1	+	6	2	1	0
Postoperatively (n=269)	222	82	39	14	1	+	6	2	1	0

additional staff would confuse patients (7%), and that it would be a costly and unnecessary service (4%).

However, the majority of the sample believed it was important to consider patients' emotional needs both preoperatively and postoperatively (Table 7).

Discussion

The response to this questionnaire (62%) was slightly lower than that reported by others with a response rate of 70% which included 454 surgeons who had 'an interest in or treated breast diseases'[1]. The results from our survey are, however, based upon responses from surgeons who treated breast cancer.

The results indicate that the majority of surgeons would treat a T1/2N0M0 tumour in the upper outer breast quadrant of a 40-year-old woman with one of 3 surgical regimens: simple mastectomy and axillary clearance (24%); or wide excision, axillary clearance and radiotherapy (20%); or wide excision alone and radiotherapy (18%). Overall, 43% of the surgeons would perform a simple mastectomy with or without axillary staging, and 66% would perform conservative surgery with or without axillary staging. These data show that there has been a change in the management of early breast cancer since the 1983 survey[1], which reported that mastectomy was the treatment of choice for most surgeons.

Furthermore, 61% (115) of the surgeons from the present survey would undertake axillary staging with conservative surgery, compared with 16% in the 1983 survey. However, only 84 surgeons (44%) would perform the procedure of axillary clearance[5].

The majority (90%) believed that local treatment affected patients' morale, and 97% believed it was important to consider patients' emotional needs preoperatively. Despite these high figures, 42% of the surgeons (n=270) only had 5-10 min to spend with patients in an outpatient clinic, and 27% (n=261) felt they never/in very few cases had as much time as they would like to spend with patients. As only 52% of the surgeons (n=285) had access to a breast care nurse and/or a cancer counsellor, it would appear that the time and support needed to consider patients' emotional needs preoperatively were extremely limited.

Regarding choice of surgery, 62% would offer the patient the choice of surgery in every/most cases, although 74% of these surgeons did not provide supplementary written information about treatment options. Unless these surgeons have the time to counsel patients themselves, many patients may not be getting the advice necessary to make informed decisions about treatment options. This is a matter of concern as approximately one-third of these surgeons felt they never/in very few cases had as long as they would like with patients.

When mastectomy was the preferred form of treatment, the majority of surgeons did not discuss breast reconstruction. Given the known incidence of psychiatric morbidity following mastectomy[6], such a practice would appear to contradict the results which indicated that the majority of surgeons believed local treatment affected patients' morale, and that it was important to consider patients' emotional needs preoperatively and postoperatively.

In conclusion, the results from this survey indicate that 64% of surgeons would employ conservative surgery for early breast cancer. The majority (78%) of the surgeons in our study treated less than 50 women with breast cancer per year. The recent decision[7] concerning breast screening will initially increase these numbers of patients but we feel, similar to the King's Fund Forum, that there should be more specialist breast units. This should make it cost effective to employ specialist breast nurses who have been shown to be effective in helping the early detection of psychiatric morbidity in women with breast cancer[6].

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References

1 Gazet J-C, Rainsbury R, Ford H, Powles T, Coombes R. Survey of treatment of primary breast cancer in Great Britain. *Br Med J* 1985;**290**:1793-5

2 Fisher B, Bauer M, Margolese R, *et al.* Five-year results of a randomized with or without radiation in the treatment of breast cancer. *N Engl J Med* 1985;**312**: 665-73

3 King's Fund Forum. Consensus development conference: treatment of primary breast cancer. *Br Med J* 1986;**293**: 946-7

4 Morris J, Royle GT. Choice of surgery for early breast cancer: pre and post-operative levels of clinical anxiety and depression in patients and their husbands. *Br J Surg* **74**:1017-9.

5 Danforth D, Findlay P, McDonald H, *et al.* Complete anxillary lymph node dissection for Stage I-II carcinoma of the breast. *J Clin Oncology* 1986;4:655-62

6 Maguire P. The psychological impact of cancer. *Br J Hosp Med* 1985;**34**:100-103

7 Forrest Report. Breast Cancer Screening. (Chairman of Working Party: Professor P. Forrest) London: HMSO, 1987

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