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Informed consent: a case for more education of the surgical team

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A questionnaire was given to 37 members of staff of the Department of Surgery, Addenbrooke's Hospital, Cambridge, in order to determine whether their knowledge was adequate to give accurate information to patients regarding operations and thus to obtain properly informed consent for that operation.

Each participant was asked to estimate the 24-h and 30-day mortality for five common elective operations.

A wide range of answers was given for all operations by all groups. Estimates of 24-h mortality after unilateral inguinal herniorrhaphy differed between staff grades by a factor of 3, but estimates of 24-h mortality after thyroidectomy differed by a factor of 100 between consultant surgeons and staff nurses.

Our findings suggest that some members of the surgical team have insufficient knowledge about common operations to obtain properly informed consent from patients.

Litigation is an ever present and ever increasing hazard to all those engaged in clinical practice. The most common cause of litigation is inadequate doctor–patient communication. In addition there are often complaints that the information given by staff was inaccurate or misleading (*1,2*). It often falls to junior staff to be the person responsible for obtaining consent for operations that their seniors perform. Much information is passed to the patient in the outpatient clinic when the operation is agreed upon with the surgeon. Details particularly relevant to that patient are discussed at that time. Once in hospital, other members of the surgical team are sources of supplementary information for the patient about the operation.

This preliminary survey looks at estimates of 24-h and 30-day mortality after five common elective surgical procedures in order to assess the variation in knowledge among a variety of staff groups who could be in communication with the patient.

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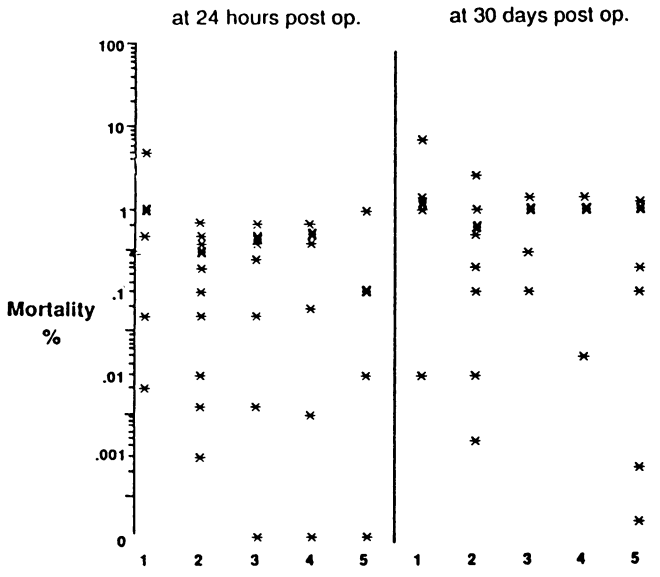
Methods

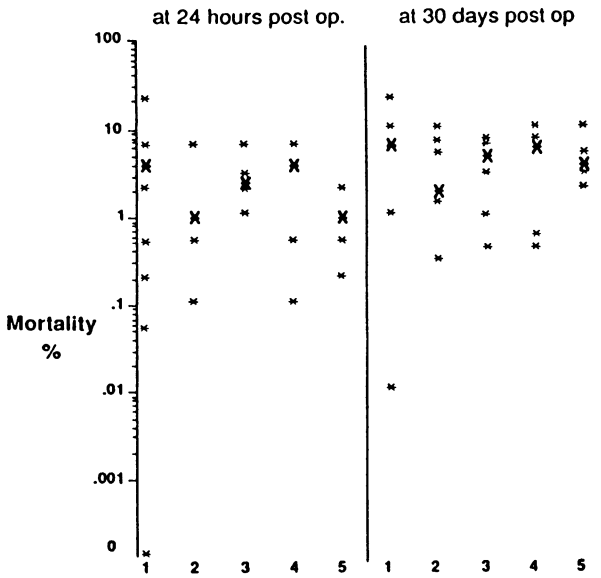
The general surgical staff of Addenbrooke's Hospital, Cambridge, were asked, by means of an anonymous questionnaire, to estimate the 24-h and 30-day mortality for five elective procedures: cholecystectomy, coronary artery bypass grafting (CABG), abdominal aortic aneurysm repair (AAA), unilateral inguinal herniorrhaphy and thyroidectomy. The response rates for the different groups are shown in Table I.

Table I. Response rate by staff group

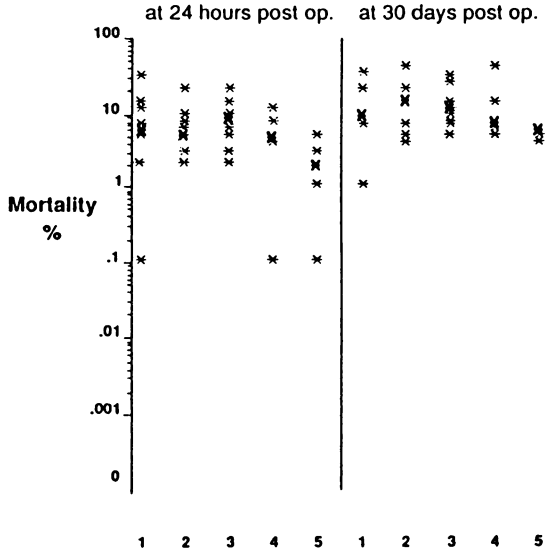
Group number	*Staff group*	*Number distributed*	*Number returned*
1	Staff nurses and sisters	12	6
2	Medical students	16	11
3	House officers (incl. SHOs)	14	10
4	Registrars (incl. SRs)	10	5
5	Consultants	8	5



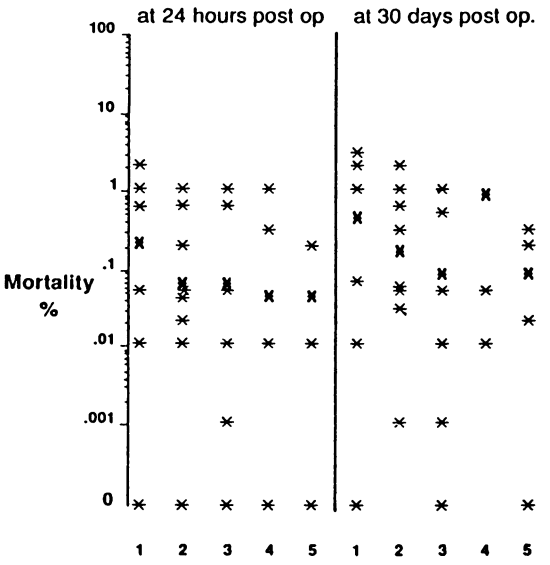
(*a*) Cholecystectomy



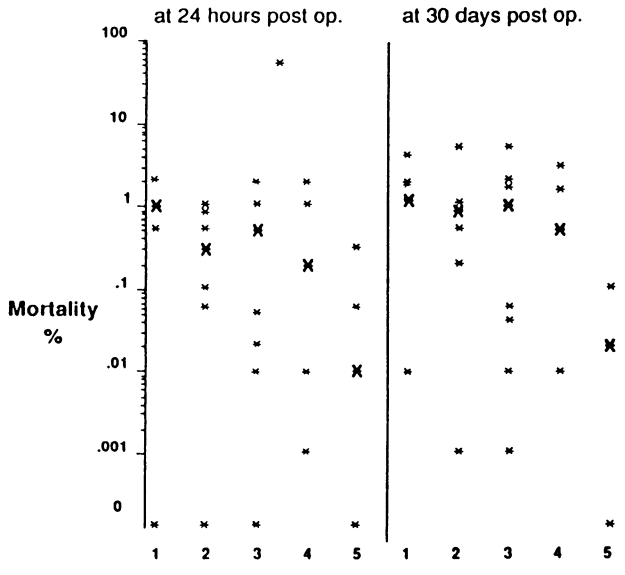
(*b*) Coronary Artery Bypass Grafting



(*c*) Abdominal Aortic Aneurysm Repair



(*d*) Unilateral Inguinal Hernia Repair



(*e*) Thyroidectomy

Figure 1. a–e, Estimates of 24-h and 30-day mortality for cholecystectomy, CABG, abdominal aortic aneurysm, unilateral inguinal herniorrhaphy and thyroidectomy. Percentage mortality plotted on a log-linear scale for each staff group 1–5 (*see* Table I). Median values shown in bold face.

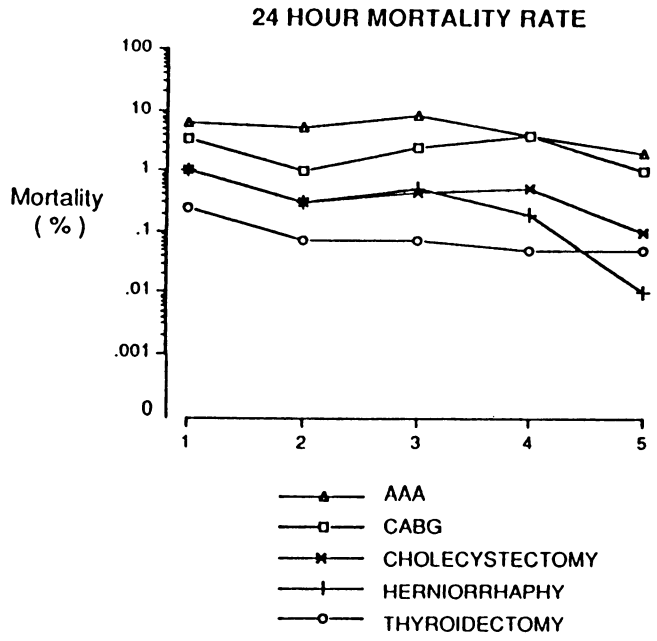


Figure 2. Median estimates of 24-h mortality for each operation according to staff group.

Where a range of values was given, the upper limit of the range was used as the respondents' maximum estimate of mortality for that procedure.

Results

Wide ranges of estimates of both 24-h and 30-day mortality were obtained from all groups for all operations (Fig. 1*a–e*). The senior grades (groups 4 and 5) gave the narrowest ranges of estimates of mortality.

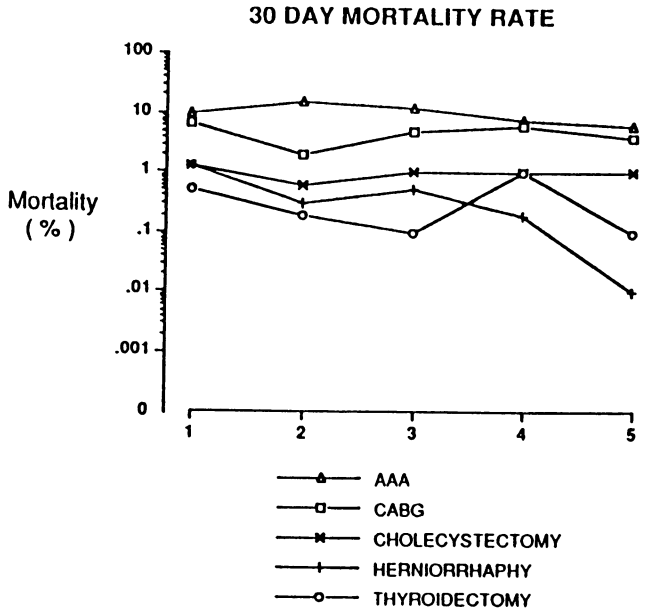


Figure 3. Median estimates of 30-day mortality for each operation according to staff group.

The median estimates of mortality for each operation show a general reduction from group 1 through to group 5 (Figs. 2, 3).

The greatest range of medians is seen for mortality after thyroidectomy. The range for 24-h mortality is 0.01% (group 5); 1.0% (group 1); for 30-day mortality the range is 0.02–1.2%. For all other operations the highest and lowest medians for both 24-h and 30-day mortality estimates lie within a factor of 10. The narrowest range of median estimates is 0.05 (groups 4 and 5); 0.15% (group 1) for 24-h mortality after unilateral inguinal herniorrhaphy.

Discussion

By comparison with published studies, all the median estimates of 30-day mortality in this survey overestimate the risk of elective surgery (Table II). There are no reliable figures available for 24-h mortality after elective procedures, and few 30-day figures for herniorrhaphy and thyroidectomy. It seems likely that unexpected or sudden death after surgery may play a part in the overestimation. This is illustrated by the fact that two of five registrars estimated 24-h mortality after thyroidectomy as 1%, perhaps reflecting the dramatic nature of pretracheal haematoma.

The senior groups (groups 4 and 5) provided the most accurate estimates of 30-day mortality (Figs. 2, 3). However, three of five registrars estimated 30-day mortality as 1% for herniorrhaphy (Fig. 1d). Can such senior members of the surgical team really think that 1 death per 100 operations is an acceptable risk following a relatively minor procedure? With patients demanding more and more information about their operations *(18,19)* and increasingly resorting to the courts if this information is not forthcoming, surgeons will have to be able to quantify their results.

Should the operating surgeon explain the risks personally to the patient? Medicolegal pressures have made this standard procedure in the USA and increasingly may do so here. The results of this pilot survey demonstrate large gaps in the knowledge of outcome of common surgical procedures, particularly among the junior grades. It would be desirable to standardise the information given by members of the surgical team, but to

Table II. Comparison of ranges of medians with published 30-day mortality figures

	30-day mortality	
Operation	*Literature*	*This survey*
Cholecystectomy	0–0.4% *(3–5)*	0.6–1.3%
CABG	1.8–2.4% *(6–8)*	2.0–6.5%
AAA	0–5.1% *(9–13)*	6.0–15%
Herniorrhaphy	0–0.5% *(14,15)*	0.1–1.0%
Thyroidectomy	0–0.13% *(16,17)*	0.01–1.3%

guarantee this would be difficult. This study emphasises the importance of senior surgeons informing the patient about the operation and discussing the relevant risks before the patient comes into hospital.

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