A study on surgical knowledge of house officers and their role in consent

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This study shows a targeted training for house officers relating to surgical procedures and consenting issues was helpful. The authors recommend that advice on obtaining consent should be a part of the induction programme for surgical house officers.

INTRODUCTION

Informed consent (Johnston and Thomas, 1995; Bunch, 2000) is obtained by explaining to the patient in non-technical terms the nature, purpose and risks of the proposed investigation or treatment. This should include alternative treatments available and prognosis and outcome of the condition and the treatment in question. This requires sufficient knowledge (Johnston and Thomas, 1995; General Medical Council, 1998; Bunch, 2000; Department of Health, 2001) on the part of the person involved in securing consent.

The majority of consent forms are signed and secured by house officers with the patient and they may be apprehensive about their role (Paice et al, 2001). It is still a common practice in the majority of hospitals in the UK to delegate the process of obtaining consenting to house officers. Surprisingly, some house officers still obtain consent for major and complex major procedures without sufficient knowledge (Paice et al, 2001).

Presently General Medical Council (1998) and Department of Health (2001) guidelines require the person who is seeking informed consent to be knowledgeable and to be prepared to answer all the patient's questions. The Bristol inquiry report (Bristol Royal Infirmary Inquiry, 2001) also endorses the Department of Health recommendations on consent and the consensus is if the delegated person is not knowledgeable then it is not an informed consent (Huntley et al, 1991).

It is the authors' belief that house officers should not be allowed to consent if they are not familiar with the procedures themselves. General Medical Council guidelines for house officers require formal instruction and in-service learning about informed consent for house officer posts. The house officer is often the first line of contact for the surgical patient and needs to be familiar with various surgical procedures, including indications, procedure, benefits and risks. They may be able to contact a more senior member of staff such as a senior house officer or a specialist registrar if the patient needs more detailed information (Dawes and Davison, 1994). For the majority of house officers the surgical posting is their only opportunity to learn about surgery and this should be spent wisely.

The purpose of this study is to assess the consenting and surgical knowledge of house officers and to assess whether an information leaflet and instructions with a targeted approach towards consenting could augment the performance of new graduates.

METHODS

Nine commonly performed index procedures were selected: inguinal hernia repair, laparoscopic cholecystectomy, haemorrhoidectomy, mastectomy, anterior resection, abdominoperineal resection, thyroidectomy, gastrectomy and appendicectomy. Laparoscopic rectopexy was also selected to illustrate that the house officer may be consenting for an unfamiliar procedure without sufficient knowledge.

Surgical consultants set a score for each operation which covered various aspects of informed consent such as indications, procedure, benefits, risks, prognosis and alternative treatments available. The consultant-set scores were inguinal hernia repair (11), laparoscopic cholecystectomy (7), haemorrhoidectomy (8), abdominoperineal resection (10), anterior resection (11), laparoscopic rectopexy (7), mastectomy (11), thyroidectomy (5), gastrectomy (8) and appendicectomy (5).

In consenting for a inguinal hernia repair a point each was given for describing the procedure in brief, options available, use of mesh, time off work, implications for driving, length of stay, lifting weights, scrotal bruising, neuropathy, recurrence and infection. Likewise for a complex major procedure such as abdominoperineal resection a point each was given for describing the procedure, options available, bowel preparation, awareness of stoma, prognosis, hospital stay, high dependency unit/intensive care unit care, pain relief (epidural), impotence and further management.

The consenting and surgical knowledge of five house officers who had come to the end of their surgical posting (old) was assessed on the ten index operations. This was repeated with a group of five house officers who commenced their surgical posting immediately after graduation (new). The new group was then issued information leaflets on these procedures covering consenting issues and were reassessed after a month.

The new group and the old group completing their surgical posting were compared to see if there was any educational benefit gained from the surgi-

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cal posting. The median percentage scores were calculated by comparing the median scores achieved by the house officers for each operation against the consultant-set scores. Statistical analysis was performed using SPSS 10. The new (post training) and old groups were compared using the Mann–Whitney U test. Likewise, the results of the new group (post training) were compared before and after they received the leaflets using the Wilcoxon signed rank test.

RESULTS

With inguinal hernia repair the old group scores ranged from 4 to 7, the median score was 6 and the median percentage score was 55%. For the new group the scores for inguinal hernia repair ranged from 2 to 6 with a median score of 5 and a median percentage score of 45%. After leaflet education the new group scores for inguinal hernia repair ranged from 5 to 10 with a median score of 9 and a median percentage score of 82%.

The median percentage scores achieved by the old group ranged from 14% for laparoscopic rectopexy to 80% for thyroidectomy and for the new group it ranged from 0% for laparoscopic rectopexy to 60% for thyroidectomy (*Table 1*). After leaflet distribution, the new group scores improved from 71% for laparoscopic rectopexy to 100% for thyroidectomy. The median overall change accounting for all procedures was 37%.

The new group (post training) showed improved performance overall in obtaining consent for all surgical procedures when compared with the old group. This was statistically significant in procedures such as inguinal hernia repair (P=0.05), abdominoperineal resection (P=0.01) and mastectomy (P=0.008) (Mann–Whitney U test, *Table 2*).

The new group (post training) also showed improved performance overall in obtaining consent for all surgical procedures when compared with themselves before training. This improvement was statistically significant in procedures such as inguinal hernia repair (P=0.04), abdominoperineal resection (P=0.04), mastectomy (P=0.04) and thyroidectomy (P=0.03) (Wilcoxon signed rank test, *Table 2*).

TABLE 1.
Median percentage scores for each surgical procedure

Procedure	Old group	New group	New group (post leaflet)
Inguinal hernia repair	55%	45%	82%
Laparoscopic cholecystectomy	57%	43%	57%
Haemorrhoidectomy	25%	25%	63%
Abdominoperineal resection	40%	40%	80%
Anterior resection	55%	36%	64%
Laparoscopic rectopexy	14%	0%	71%
Mastectomy	36%	36%	73%
Thyroidectomy	80%	60%	100%
Gastrectomy	38%	25%	75%
Appendicectomy	40%	40%	60%

TABLE 2.
Statistical analysis

Old *vs* new (post training)	Mann–Whitney U test
Inguinal hernia repair	0.056
Laparoscopic cholecystectomy	0.222
Haemorrhoidectomy	0.151
Abdominoperineal resection	0.016
Anterior resection	0.151
Laparoscopic rectopexy	0.421
Mastectomy	0.008
Thyroidectomy	0.151
Gastrectomy	0.421
Appendicectomy	0.222
New (pre training) *vs* new (post training)	**Wilcoxon signed rank test**
Inguinal hernia repair	0.042
Laparoscopic cholecystectomy	1
Haemorrhoidectomy	0.109
Abdominoperineal resection	0.043
Anterior resection	0.074
Laparoscopic rectopexy	0.102
Mastectomy	0.042
Thyroidectomy	0.038
Gastrectomy	0.102
Appendicectomy	0.059

DISCUSSION

The standard consent form (Byrne et al, 1988) is in the process of being modified and discussions are being held to implement a new system. The new system will take time to be implemented and this study may be important at this juncture. Medical students spend very little time of their training in general surgery. As house officers they have an excellent opportunity to learn about surgery, and for the majority of them it will be the only opportunity to improve their surgical knowledge.

This study has shown that the group of house officers finishing their 6-month term were none the wiser than their new counterparts in consenting patients for procedures such as mastectomy, abdominoperineal resection, haemorrhoidectomy and appendicectomy. They may have gone through their posting without improving their knowledge on these procedures because of a lack of targeted training. In procedures such as inguinal hernia repair, laparoscopic cholecystectomy, anterior resection, laparoscopic rectopexy, thyroidectomy and gastrectomy the old group fared better than the new one. This may be a result of the knowledge they acquired during their posting.

This study found that the house officers had inadequate knowledge about various surgical conditions and the procedures involved. The authors accept that house officers should not be expected to know advanced details about surgery such as the role of adjuvant therapy or even complication rates. Some surgeons might feel consenting should not be done by house officers and only the operating surgeon should obtain consent. This is reflected in the Department of Health (2001) guidelines to consenting.

It must be accepted that house officers need to be trained in the process of consenting. Presently in most hospitals there is no induction programme on consenting and there is no targeted training towards consenting. In practice, since house officers are the first lines of contact for the surgical patients it is useful for them to know about various surgical problems so that they can advise patients. Learning is a two-way process but there has to be a willingness to learn.

The system of leaflet education used in this study is one method of targeted training and it has been successful in this case. The authors feel that targeted training by leaflets should be part of the induction for surgical house officers and they should be encouraged to attend clinics, theatre sessions and try and assist some procedures, which may improve their knowledge. Every house officer may benefit from attending theatre sessions on a regular basis as a part of their educative process and perhaps it should be included as part of their assessment on completion of their posting. Consenting is a complex process and should be taught by the consultants in conjunction with practical experience.

KEY POINTS

- House officers are the first line of contact for surgical patients on the ward and are required to learn the consenting process.
- Consenting procedures and surgical knowledge of present house officers do not satisfy current General Medical Council guidelines.
- Advice on consenting and provision of a leaflet on consenting and surgical procedures has been shown to improve performance.
- Targeted training about consenting should be part of induction for surgical house officers.
- Most medical students have minimal exposure to surgical units and there is scope for improvement.

CONCLUSION

This study has shown that the surgical consenting knowledge of house officers can be improved if there is a willingness to learn and a constructive teaching programme in place. It has to be accepted that the present training of house officers in surgery is inadequate and needs to be addressed. This educative process needs to be commenced at the undergraduate stage where students spend far less time being attached to surgical firms. HM

Conflict of interest: none.

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