A survey of post-intake orthopaedic trauma meetings in England

IAIN R McNAMARA, JOHN R CRAWFORD, DENNIS J EDWARDS

Department of Trauma and Orthopaedics, Addenbrooke's Hospital, Cambridge, UK

ABSTRACT

INTRODUCTION The structure of trauma meetings has been noted to vary considerably throughout our region. The aim of this study was to assess current practice of trauma meetings on a national level and to propose a structure on the basis of the survey.

MATERIALS AND METHODS A telephone survey of 120 hospitals in England was performed with a 100% response rate. The on-call duty orthopaedic surgeon at each hospital was contacted and questioned regarding trauma meetings held at that hospital. Details obtained included the frequency of meetings, the presence of medical staff and staff from other disciplines, review of radiographs and educational value.

RESULTS In total, 107 (89.2%) hospitals conducted regular trauma meetings with a mean duration of 36 min (range, 15–120 min). Teaching of junior medical staff occurred at 89 (83.2%) meetings. Postoperative radiographs were reviewed at 80 (74.8%) hospitals. A radiologist attended in 5 (4.7%) of meetings. The median number of consultants present was 3 (range, 1–10). Other attendees included trauma co-ordinators (34.6%), physiotherapists (30.8%), theatre staff (23.4%), nursing staff (20.6%) and anaesthetists (15.9%).

CONCLUSIONS Trauma meetings assist with the organisation of trauma lists, the review of results and have a valuable educational component. However, in busier orthopaedic units, additional meetings for teaching purposes may be necessary as an adjunct to routine daily trauma meetings.

KEYWORDS

Trauma meetings – Survey – Telephone survey

CORRESPONDENCE TO

Iain R McNamara, 28 Botanical Road, Sheffield S11 8RP, UK
E: imcnamara@doctors.net.uk

Clinical governance explicitly imposes a responsibility on physicians to maintain good medical practice and to strive for the highest standards.¹ In orthopaedic surgery, acute trauma admissions contribute to a substantial proportion of the workload. Many hospitals have instituted regular dedicated orthopaedic trauma lists to organise emergency operating thereby leading to a reduction in the amount of out-of-hours operating.²

As part of this process, orthopaedic trauma meetings are held at many hospitals to facilitate the discussion of trauma cases, to plan their orthopaedic management and operating lists and to be used as a forum for teaching and education. Throughout our region, the structure of orthopaedic trauma meetings was noted to vary considerably. However, a review of the literature noted that the structure, attendance and quality of trauma meetings have not been previously studied.

The aim of this study was to determine the format and content of trauma meetings with respect to current practice

on a national level and highlight the importance of a multi-disciplinary approach.

Materials and Method

A telephone survey was performed between 1 March and 31 May 2004. All hospitals throughout England with an orthopaedic department managing acute trauma admissions were included in the study.

The duty orthopaedic surgeon on-call (at middle-grade level) was contacted by telephone through the main switchboard at each hospital. All the surgeons contacted agreed to participate in the study. Each surgeon was asked a series of specific questions relating to the trauma meetings held within their department over the previous week.

The questions related to different aspects of trauma meetings including the frequency and duration of trauma meetings, the level and educational value of any formal teaching within the meeting, the number and type of medical personnel

Table 1 Number of hospitals that review postoperative trauma radiographs during trauma meetings

Policy for reviewing postoperative radiographs	Number of hospitals (%)
All trauma operations	16 (15.0)
Operations performed during the last 24 h only	8 (7.5)
Operations performed outside routine working hours only	55 (51.4)
No review of postoperative radiographs	28 (26.1)

Table 2 Number and grade of surgeons present at trauma meetings

Grade of surgeon	Number present in trauma meetings (median and range)	Proportion of the total number in each department (%)
Consultant	3 (1–10)	38.3
Specialist registrar	5 (0–12)	77.3
Senior house officer	6 (1–11)	81.6

attending, the capacity for review of post-operative trauma radiographs and the availability of refreshments at the meetings.

Results

A total of 120 hospitals throughout England were surveyed with a 100% response rate. Of these, 107 (89.2%) hospitals conducted regular trauma meetings with a mean duration of 36 min (range, 10–120 min). Of those hospitals holding trauma meetings, 93 (86.9%) hospitals held a trauma meeting every day. The mean number of acute trauma admissions per 24-h period was 7 (range, 2–15).

Of those hospitals holding trauma meetings, formal teaching of junior medical staff occurred during trauma meetings at 89 (83.2%) hospitals. Postoperative trauma radiographs were reviewed routinely at 79 (73.8%) hospitals (Table 1).

Fifteen (14.0%) orthopaedic units held a separate teaching session each week in which the presentation and management of trauma from the week was reviewed. This was in addition to the daily trauma meeting.

The attendance of consultants, specialist registrars and senior house officers at the trauma meetings is outlined in Table 2. At least one consultant was present during trauma meetings at every hospital surveyed. Attendees from other disciplines were variable (Table 3).

Refreshments were provided during trauma meetings at 19 (17.8%) hospitals. The type of refreshment available included tea and coffee 12 (11.2%), biscuits 4 (4%), and sandwiches 7 (6.5%).

Discussion

Trauma meetings form an integral part of the orthopaedic time-table. They provide a regular opportunity to discuss the orthopaedic management of trauma patients and they also have an important function in the organisation of orthopaedic trauma lists. However, a formal survey of what constitutes such a meeting has never been performed.

This study shows that most hospitals in England (89.2%) conduct daily orthopaedic trauma meetings; however, the differing attendance and structure of such trauma meetings is highlighted.

The attendance at the meeting varied between units, with medical staff attending from many disciplines as outlined in Tables 2 and 3. The greatest attendees were the

Table 3 Types of medical personnel attending orthopaedic trauma meetings at hospitals throughout England

Type of personnel	Number of hospitals (%)
Trauma nurse co-ordinator	37 (34.6)
Physiotherapist	33 (30.8)
Theatre staff	25 (23.4)
Ward nursing staff	22 (20.6)
Anaesthetist	17 (15.9)
Radiologist	5 (4.7)
Plaster technician	2 (1.9)

junior doctors; this is of particular importance since the implementation of the European Working Time Directive³ has recently decreased the working hours for junior doctors and has led to a reduction in the continuity of care of patients.⁴ Orthopaedic trauma meetings play an important role in providing continuity for the safe handover of patients between changing medical personnel and between different consultant teams.

The attendance from other disciplines at trauma meetings is outlined in Table 3. We believe that all of these disciplines have an important role to play in the functioning of an acute orthopaedic unit. In total, 34.6% of hospitals employed a 'trauma nurse specialist' whose function was to provide a useful link between the multiple disciplines involved with trauma patients and was involved in the booking of lists. An anaesthetist attended the trauma meetings at a small number of hospitals (17%) in our study. Their input can be very useful in discussing medically unfit patients at an early stage and to providing further input when prioritising patients for trauma lists.

A member of theatre staff was present at 23.4% of meetings. They were used to provide a useful link to ensure any specific equipment that may be required is available and to facilitate the smooth running of trauma lists. Ward staff (nurses and physiotherapists) were often present at the meetings. Their input was useful for both the pre- and post-operative care of patients. This multidisciplinary approach allows an informal forum for the discussion of cases that are of particular concern from a nursing perspective, allows modification of postoperative management and avoids patients remaining 'nil-by-mouth' unnecessarily.

The structure of the meetings varied and, although trauma meetings provide an ideal environment for operative quality control through the review of postoperative radiographs, in our study 26.1% of hospitals did not routinely review postoperative trauma radiographs during their meetings. We feel that the regular review of postoperative radiographs is very important for teaching purposes as well as providing an instant form of 'peer review' that is unique to orthopaedic surgery. In addition, only 5 hospitals had a radiologist at the

meeting but all 5 said that their input was invaluable in the interpretation of difficult radiographs and suggesting and expediting additional radiological investigations.

The use of the radiographs as a focus for discussion of cases was reflected by the perception amongst junior staff that 83% of trauma meetings also had a role in the education and training of junior doctors. However, some respondents highlighted insufficient time within a busy trauma unit as a reason for the lack of teaching during trauma meetings. For this reason, 15 (14.0%) orthopaedic units held a separate weekly session for the purpose of teaching.

Conclusions

On the basis of this survey, we believe that daily trauma meetings are important for the review of acute orthopaedic admissions and subsequent planning of trauma lists. At present, the majority of orthopaedic departments have daily trauma meetings but the structure is variable. We would advocate that a multidisciplinary approach is the best with anaesthetists, radiologists, ward and theatre staff attending to aid in the best delivery of pre-, peri- and postoperative patient care. The review of postoperative radiographs is important and should remain as part of the trauma meeting; however, departments should consider the use of a separate session to protect teaching time and to aid the time effectiveness of the trauma meeting.

References

1. The Royal College of Physicians. *Physicians maintaining good medical practice: clinical governance and self-regulation*. London: The Royal College of Physicians, 2000 <www.rcplondon.ac.uk/news/news_clin_gov.htm>.
2. Jennings AG, Saeed K, Dolan S, Wise DI. Impact of the introduction of a daily trauma list on out-of-hours operating. *Ann R Coll Surg Engl* 1999; **81**: 65–8.
3. Council Directive 93/104/EC. *Official Journal of the European Community* 1993; **307**: 18–24.
4. Scott-Coombes D. European working time directive for doctors in training: reduction in juniors' hours abolishes concept of continuity of care. *BMJ* 2002; **324**: 733–6.