Audit

Consent in orthopaedic surgery

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Aim: To investigate whether the guidelines set out by the UK Department of Health on informed consent are being followed nationally in orthopaedic surgery.

Methods: A postal questionnaire of UK orthopaedic consultants was undertaken asking about consenting procedures for an elective and a trauma situation.

Results: In 53 of 110 cases, the most junior member of the team takes consent, and patients are not being warned about specific complications and risks associated with surgery.

Conclusions: The guidelines issued by the Department of Health are not being adhered to, and the consenting doctor needs to be aware of the medical and legal responsibilities in taking informed consent.

Key words: Consent – Orthopaedic surgery

The origins of informed consent come from philosophy, medical experimentation, the law and contemporary trends in doctor and patient relationships.¹ Every surgical patient requires informed consent. The UK Department of Health (DoH)² and General Medical Council (GMC)³ have guidelines for doctors to obtain informed consent correctly. We set out to see if these guidelines were being followed, and if consent was informed.

Patients and Methods

A total of 100 orthopaedic consultants were randomly selected from the British Orthopaedic Register. Participants were asked to complete a questionnaire enquiring about their consenting procedure in two scenarios. The first involved a 65-year-old patient about to undergo a primary total hip replacement, and the second a 30-year-old male due to undergo tibial nailing for a closed mid-shaft tibial fracture. Participants were asked about the grade of doctor routinely taking consent and associated complications discussed with the patient.

Results

In all, 55 completed questionnaires were returned. Results for the elective total hip replacement scenario and for the trauma scenario are summarised in Tables 1 and 2, respectively.

Table 1 Results for the elective total hip replacement scenario

Consent taken by*

PRHO/SHO	23/55 (42%)
Middle-grade surgeon	12/55 (22%)
Consultant	20/55 (36%)

Specific complications and risks

DVT/PE	37/55 (67%)
Infection	40/55 (73%)
Dislocation	39/55 (70%)
Bleeding	17/55 (31%)
Need for revision in future	12/55 (22%)

*An information sheet was given in 7/55 (13 %) of cases

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Table 2 Results for the trauma scenario

Consent taken by	
SHO	30/55 (55%)
Middle grade-grade surgeon	15/55 (27%)
Consultant	10/55 (18%)
Specific complications and risks	
Infection	28/55 (51%)
Compartment syndrome	23/55 (42%)
Anterior knee pain	21/55 (38%)
Subsequent nail removal	23/55 (42%)

Alternative treatments (e.g. plaster, plate/screws and external fixator) were only mentioned in 11/55 (20%) cases.

Discussion

In accordance with the recommendations from the DoH,² GMC³ and the Medical Defence Union (MDU),⁴ doctors have a duty to provide patients with sufficient information about their medical condition and the various treatment options available for them so that they are able to make an informed choice. This information includes an explanation of the patient's condition, the possible treatments available including their advantages and disadvantages, the consequences of non-treatment, and the risks and complications associated with each type of treatment. It is the responsibility of the health professional carrying out the procedure to ensure that adequate informed consent has been taken, as it is they who will be held responsible in law if this is challenged later.² Other members of the team can take consent; however, they should be appropriately qualified and familiar with the details involved.

The results of the postal questionnaire show that, in a routine elective situation, consent is taken by the most junior member of the team in 23 out of 55 cases (42%) and in a trauma situation 30 times out of 55 (55%). As stated earlier, the DoH guidelines² state that it should be the person carrying out the procedure who should take consent, as it is this person who is ultimately responsible. Assuming that majority of total hip replacements and intramedullary nails are performed by middle-grade surgeons and above, adequate consent is not being taken in the majority of cases.

As regards specific complications, patients must be informed about these to make an informed choice. Doctors must consider the severity and likelihood of risk compared with the need for the procedure.⁴ The legal position on whether or not a doctor is negligent in failing to mention a risk was decided in the UK in the case of Sidaway.⁵ A practitioner can expect to avoid liability if the court finds that a reasonably competent practitioner in a

similar position would not have mentioned the risk, and that responsible body of relevant and reasonable professional opinion supported such a decision. This is known as the Bolam test.⁶

Our survey shows that certain complications are not mentioned to patients before undergoing surgical procedures. Some of these are now discussed further and compared with the best available evidence stating the frequency of these risks. With respect to dislocation, this has multifactor causes and the evidence shows that this can vary from 0.6% to 5.8% depending on the approach used.^{7,8} Our study shows that in 30/55 (70%) of cases, it was mentioned to patients. There is always a risk of long-term failure after total hip replacement due to aseptic loosening, the Swedish Hip Register shows this to be about 20% at 20 years; however, this was only mentioned in 12/55 (22%) of cases. As regards to bleeding, the average blood loss following THR is 500 ml.⁹ Transfusion requirements vary with individuals and their physiological state, but patients should be warned that they might require a blood transfusion. In our study, patients were only warned regarding the risk of bleeding in 12/55 (22%) of cases.

The indications for intramedullary nailing have expanded over the last 20 years. There are a number of risks and complications associated with it both in the short- and long-term. Compartment syndrome can occur after any tibial fracture and after intramedullary nailing. The available evidence shows that this can vary between 2.6% and 10%.^{10,11} In our survey, less than half (42%) the patients were informed of this risk. Anterior knee pain can be troublesome after intramedullary nailing. This is related to nail entry through the proximal tibia near the knee joint and also disturbance of the patella tendon. The available evidence shows that the incidence can be as high as 78%.¹² Even after nail removal, there is no guarantee that the pain can subside.

Conclusions

Failure to provide adequate informed consent may constitute a breach of a doctor's duty of care to the patient. Our survey shows that guidelines issued by the DoH² and GMC³ are not being adhered to and there is room for improvement. The consenting and treating doctor needs to be aware of the medical and legal responsibilities in taking informed consent. If an individual doctor does not feel adequately skilled or trained on providing informed consent, then he/she should ask a senior member of the team to take consent.

References

1. Bunch W. Informed consent. *Clin Orthop* 2000; **378**: 71–7.
2. Department of Health. *Good Practice in Consent Implementation Guide*:

- Consent to examination or treatment*. London: Department of Health, 2001.
3. General Medical Council. *Seeking Patients' Consent: The Ethical Considerations*. London: General Medical Council, 1999.
 4. Medical Defence Union. *The MDU's Guide to Consent to Treatment*. London: MDU Services, 2001.
 5. Sidaway v Board of Governors of Bethlem Royal and the Maudsley Hospital, WLR 480, 1985.
 6. Bolam v Friern Hospital Management Committee, 1 WLR 582, 1957.
 7. Williams JF, Gottesman MJ, Mallory TH. Dislocation after total arthroplasty. *Clin Orthop* 1982; **171**: 53–8.
 8. Woo RY, Morrey BF. Dislocation after total hip arthroplasty. *J Bone Joint Surg Am* 1982; **64**: 1295–306.
 9. Canale ST (ed) *Campbell's Operative Orthopaedics*, 9th edn. St Louis, MO: Mosby, 1998; 383.
 10. Hamza KN, Dunkerley JE, Murray CM. Fractures of the tibia. A report of fifty cases treated by intramedullary nailing. *J Bone Joint Surg Br* 1971; **53**: 696–700.
 11. McQueen MM, Christie J, Court-Brown CM. Compartment pressures after intramedullary nailing of the tibia. *J Bone Joint Surg Br* 1990; **72**: 395–7.
 12. Orfaly R., Keating JF, O'Brien PJ. Knee pain after tibial nailing: does the entry point matter? *J Bone Joint Surg Br* 1995; **77**: 976–7.