



# **Patient consent for peripheral nerve blocks**

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## **Section 1: Introduction**

Peripheral nerve blocks are routinely performed by anaesthetists to provide anaesthesia and analgesia for patients undergoing limb surgery. Like all procedures in anaesthesia, nerve blocks are associated with certain inherent risks and complications. A properly taken consent can help patients make an informed decision about undergoing nerve blocks and will also protect an anaesthetist from subsequent criticism and litigation.

In 2006, The Association of Anaesthetists of Great Britain and Ireland (AAGBI) published “Consent for Anaesthesia”<sup>1</sup>. According to this document, information about anaesthesia should be provided to patients undergoing elective surgery before they meet their anaesthetist. This is preferably in the form of a patient friendly leaflet (patient information leaflet). Consent should be obtained prior to a patient coming to the anaesthetic room, except under exceptional circumstances. The amount and the nature of information provided to the patient should be aimed at helping the patient to make an informed decision about choosing one of the available options. Patients should also be given an opportunity to ask questions. The discussion between patient and anaesthetist should be documented in the notes; this documentation should cover what risks, benefits and alternatives were explained to the patient.

RAUK (Regional Anaesthesia United Kingdom) advise that all the recommendations made in the AAGBI guideline apply to patients having a nerve block. This RAUK guideline contains additional advice that is specific to Regional Anaesthesia.

## **Section 2: Information and the process of consent for nerve block**

2.1. Information about nerve blocks can be provided preoperatively by an anaesthetist and/or other health care professionals, including surgeons and pre-assessment nurses. However, ultimate responsibility for ensuring the adequacy of information provided to the patient lies with the person performing the block.

### **2.2. Timing of consent**

2.2.1 For elective surgery, information should ideally be given prior to the day of surgery. This could be in the form of a 'Patient information leaflet'. This can be given to the patient by the surgeon at the time of booking or by a nurse in the pre-assessment clinic. However this may not be always possible. Information about the nerve block can be given on the day of surgery, provided adequate time has been given for the patient to understand the information and to ask questions. Consent for peripheral nerve blocks should not be obtained in the anaesthetic room.

2.2.2. For emergency surgery it will not always be possible to provide a patient information leaflet prior to surgery. The consent should be obtained prior to the patient coming to the anaesthetic room. Under exceptional circumstances it may be necessary to obtain consent in the anaesthetic room.

### **2.3. Obtaining consent**

2.3.1. Although information for nerve block can be provided by other health care professionals, consent should ideally be obtained by the person performing the block.

2.3.2. Consent for the procedure may be obtained by a person who is not performing the block, provided that he/she understands the processes, the risks involved, possible complications, the benefits of the block to the patient and any alternatives (e.g. patient controlled analgesia). However, the person performing the block is still responsible for ensuring that adequate consent has been obtained and specifically, that the patient has consented for him/her to perform the block.

2.3.3. If a trainee is working under the direct supervision of a Consultant, then it is the responsibility of that consultant to ensure adequate consent has been obtained for the trainee to perform the block, and that risks are minimised.

If a trainee is not working under the direct supervision of a Consultant, then it is the responsibility of trainee to ensure adequate consent has been obtained and that the indirectly supervising consultant has been informed, if appropriate. Trainees can function autonomously within their level of expertise, as defined by the General Medical Council<sup>2</sup>. If discussion has occurred with the supervising consultant, this should be recorded and the consultant identified by name.

## 2.4. Patient information Leaflets

2.4.1. Patient information leaflets are a useful source of information. However they may not help the patient remember all the details of the nerve block<sup>3</sup>. They are not a substitute for talking to the patient directly about the nerve block.

2.4.2. Patient information leaflets should be available in the language understood by the patient. If this is not possible, a translator should be provided.

2.4.3. Patient information leaflets can be given to the patient by any healthcare professional, but the anaesthetist performing the block should make sure that the patient has read and understood the contents.

2.4.4. Whenever possible, nationally approved patient information leaflets should be used. They may be modified to reflect local circumstances.

2.4.5. Preoperative multimedia information has been shown to reduce the anxiety of patients undergoing surgery under regional anaesthesia and improve patient experience<sup>4</sup>. If possible, the patient should be shown a professionally approved video which explains the block procedure. The patient should be given the opportunity to ask any questions relating to the video.

2.4.6. Patient information leaflets should provide a prompt to the patient to ask questions or express any concerns. Contact details and “frequently asked questions” and answers should be provided.

2.4.7. Regular audit and updating of the information provided to the patient should be carried out. The audit may include the quality of information provided and usefulness of the information provided to the patient.

## 2.5. Content of the consent process

2.5.1. Patients need to know what they are consenting for. They should be told about the benefits (e.g. opioid sparing, early mobilisation, less risk of nausea and vomiting) to them of undergoing nerve block. They also need to be told the alternative options to a nerve block (e.g. having a general anaesthetic for surgery or using patient controlled analgesia for pain relief).

2.5.2. The Patient should be told about the process of nerve blockade, i.e., what he/she will feel and see. This includes use of a nerve stimulator (muscle twitches) and/or ultrasound. If they are going to be sedated for the block then they should be told about this.

Patients should be offered additional sedation or general anaesthesia, together with a clear explanation of the risks and benefits.

2.5.3. The risk of failure and alternative plans for anaesthesia and analgesia should be explained to the patient.

2.5.4. Patients should be told about any risk associated with the nerve block or any immediate side effect (e.g. Horner’s syndrome with interscalene block) which has an incidence of >1:100

2.5.5. Any risk that can have either short term (pneumothorax following supraclavicular block) or long term serious consequences (permanent nerve damage) should be discussed.

2.5.6. The exact incidence of nerve damage is not known<sup>5-8</sup>. The risk of complications is influenced by numerous factors, including patient co-morbidity, the experience of the anaesthetist, the method of nerve location and the block selected. It should be made clear to the patient that the exact incidence of nerve damage is not known. In the absence of clear figures we can rely only on the incidences quoted in the scientific literature and summarised in leaflets published by the Royal College of Anaesthetists<sup>9</sup>, which quote an incidence of approximately 1:10 for temporary nerve damage and a range from 1:2000 to 1:5000 for permanent nerve damage.

2.5.7 If a unit or an anaesthetist has audit data which indicates their local incidence of complications, they may quote these figures. However, care should be taken in interpretation, application and explanation of uncontrolled audit data, noting that statistical significance can only be achieved with a considerable sample size when assessing rare occurrences.

2.5.8. For all blocks, patients should be made aware of the risk of thermal damage to the insensate blocked limb. They should also be told that they should avoid driving, using any machinery or cooking while their limb is insensate.

2.5.9. For lower limb blocks the patient should be made aware of the specific risk of falling and heel pressure sores.

2.5.10. There are certain risks which are block specific (e.g. Horner's syndrome following Interscalene block, risk of pneumothorax following periclavicular blockade). These should be discussed with the patient.

2.5.11. If surgery is performed under block alone, then patients should be made aware that they may have tourniquet pain or operative discomfort even with a fully functioning block. They should also be informed that they may feel surgical pain, but that if this happens, the anaesthetist or surgeon will immediately administer alternative effective analgesia.

2.5.12. Patients should be repeatedly told to take postoperative pain relief well in advance of block resolution.

### **Section 3: Documenting consent**

3.1. It is not necessary to obtain specific written consent for RA to facilitate a surgical procedure, as long as written, signed consent has been obtained for the surgery. However, when RA is proposed as the sole therapeutic procedure (e.g. rib fractures, chronic pain therapy), specific signed consent should be obtained, using the local formal consent process.

3.2. All the risks/benefits/alternatives to nerve block that have been discussed with the patient should be documented in the patient's notes. If the patient asks any questions related to nerve blockade, then this discussion should also be documented.

3.3. If the patient has received a patient information leaflet, this should be documented, as well as any discussion relating to it.

3.4 If the patient has a high risk of a complication (e.g., nerve damage in diabetics), or is at higher risk than usual from the effects of the complication (e.g., their occupation), care should be taken to specifically address these issues and record the discussion in the notes.

3.5. It should be made clear in the notes that

- The Patient understood all the information given
- The patient was given the opportunity to ask questions and all their questions were answered.



#### **Section 4: References**

1. <http://www.aagbi.org/sites/default/files/consent06.pdf>  
Consent for anaesthesia. AAGBI publication 2006
2. [http://www.gmc-uk.org/The\\_Trainee\\_Doctor\\_1114.pdf\\_56439508.pdf](http://www.gmc-uk.org/The_Trainee_Doctor_1114.pdf_56439508.pdf)  
General Medical council guidance for the trainee doctor
3. Turner P. and Williams C. (2002) Informed consent: patients listen and read, but what information do they retain? The New Zealand Medical Journal Vol 115 No.1164
4. Jlala HA, French JL, Foxall GL, Hardman JG, Bedforth NM. Effect of preoperative multimedia information on perioperative anxiety in patients undergoing procedures under regional anaesthesia. Br J Anaesth. 2010;104:369-374
5. Liguori GA. Complications of regional anesthesia: nerve injury and peripheral neural blockade. J Neurosurg Anesthesiol 2004;16:84-6.
6. Auroy Y, Benhamou D, Bargues L, et al. Major complications of regional anesthesia in France: the SOS Regional Anesthesia Hotline Service. Anesthesiology 2002;97:1274-80.
7. Liu SS, Zayas VM, Gordon MA, et al. A prospective, randomized, controlled trial comparing ultrasound versus nerve stimulator guidance for interscalene block for ambulatory shoulder surgery for postoperative neurological symptoms. Anesth Analg 2009;109:265-71.
8. Fredrickson MJ, Kilfoyle DH. Neurological complication analysis of 1000 ultrasound guided peripheral nerve blocks for elective orthopaedic surgery: a prospective study. Anaesthesia 2009;64:836-44.
9. <http://www.rcoa.ac.uk/system/files/PI-RISK12-NERVEBLOCK-2013.pdf>  
Royal College of Anaesthetist document on risk associated with anaesthetic, section 12.