A patient’s guide to the

Anaesthetic Options for Hip or Knee Surgery
This leaflet has been produced to help answer some questions about your choice of anaesthesia for hip or knee surgery.

**Introduction**

Your anaesthetist will meet you on the morning of your operation and they will talk to you about which kind of anaesthetic is suitable for you. This is the time to ask questions and tell the anaesthetist about any worries you have.

To help prepare you for your surgery, it is helpful to know the common types of anaesthetic options available:

**General anaesthesia**

- A general anaesthetic produces a state of controlled reversible unconsciousness

**Regional anaesthesia**

- Spinal anaesthesia
- Epidural anaesthesia
- Nerve block.

All these types of regional anaesthesia involve the use of local anaesthetic medication to numb particular areas of the body affected by the surgery, and a combination of these techniques may be used together with a general anaesthetic.
General anaesthesia

- General anaesthesia provides a state of controlled unconsciousness. It is essential for certain operations.
- You will first get a cannula (a plastic tube) inserted into the back of your hand.
- You are often given oxygen via a clear mask placed on your face before you go to sleep.
- The anaesthetic medication will then be injected via your cannula and this will cause you to become unconscious, and go to sleep.
- Once you are unconscious, your anaesthetist stays with you at all times and continues to give you anaesthetic agents to keep you unconscious until the operation is complete.
- A breathing tube will be placed in your throat when you are asleep to allow oxygen and anaesthetic agents to move easily into your lungs.
- If you have been given drugs to relax your muscles, you will not be able to breathe for yourself, and a breathing machine (ventilator) will be used.
- The advantage is that you will be unconscious during the operation.
- A general anaesthetic alone does not provide pain relief, so you will need strong painkillers during and after the operation, for example, morphine like medication.
- Possible complications include sickness (which can be treated with anti-sickness drugs), sore throat (which can be treated with pain relief drugs), shivering and blurred vision (which can be treated with fluids and drugs), difficult breathing at first (which usually improves rapidly), and drowsiness or confusion (which are more common in older people, but are usually temporary).
Spinal anaesthesia

• A small dose of local anaesthetic is placed around the nerves in your lower back. This is done by doing an injection in your lower back with you either sitting up or lying down on the side. This procedure is done in theatre before you have surgery
• This causes a feeling of numbness from the waist down and blocks pain pathways for the duration of surgery and several hours afterwards
• You remain conscious, in control of your breathing, and breathe better in the first few hours after your operation
• You will need painkillers after the numbness wears off
• After spinal anaesthesia, you should have less sickness and drowsiness after the operation and may be able to eat and drink sooner. It may also help avoid blood clots in your legs and lungs. This means you may be ready to get up and start using your new joint sooner
• There is some evidence that less bleeding may occur during surgery, which would reduce your risk of requiring a blood transfusion
• Possible complications include failure, headache, low blood pressure, itching, and very rarely a blood clot in your back or infection
Epidural anaesthesia

- A very fine plastic tube (epidural catheter) is passed through a needle into a space near to the nerves in your back
- Through this tube you receive a dose of local anaesthetic which will relieve pain and reduce the feeling in your lower back and legs
- The tube allows the numbness to be topped up for as long as needed following your operation, usually 1-3 days.
- Epidurals are used if the operation is expected to be long (for example beyond 3 hours) or particularly painful afterwards
- An epidural is usually combined with a spinal or general anaesthetic
- Possible complications include failure, headache, reduced mobility post-operatively, and very rarely a blood clot in your back or infection

Nerve block

- This is an injection of local anaesthetic near to the nerves that go to your leg
- A nerve block is not used alone, but usually combined with a general anaesthetic
- Part of your leg will be numb and pain free for several hours after the operation
- With a nerve block you usually need less pain relief medicine to keep you comfortable, which means you may have less sickness and drowsiness afterwards
- Possible complications include failure or incomplete numbness, and reduced mobility after your operation
What if I don’t want to be awake?

- Spinal / epidural anaesthetics allow you to avoid having a general anaesthetic
- If you do not wish to be fully awake for your operation your anaesthetist can give you sedation so that you will feel sleepy and relaxed during the surgery
- Some people prefer to avoid any sedation and are happy to remain fully conscious

A combination of anaesthetics

- Often, a spinal or epidural or nerve block anaesthetic can be combined with a general anaesthetic
- The advantages are that you gain the benefits of a spinal or epidural anaesthetic, but you are unconscious during the operation
- The general anaesthetic may be ‘lighter’ in strength, which means the unpleasant after-effects of the general anaesthesia may be less

Your anaesthetic

- Will ultimately be decided by your anaesthetist after discussion with yourself
- May vary depending on whether you are having your hip or knee replaced or whether you are undergoing revision surgery
- May also depend on your other medical problems or allergies to certain pain relieving drugs
Where can I get further information?

This information leaflet provides a brief overview of the anaesthetic options for hip or knee surgery. In modern anaesthesia serious problems are uncommon. Risk cannot be removed completely, but use of modern equipment and medicine, together with on-going training, anaesthesia has been made much safer in recent years.

For detailed and extensive information on all aspects of anaesthesia, including further advantages/disadvantages and detailed risks, please visit the Royal College of Anaesthetists www.rcoa.ac.uk/patientinfo