

Anaesthesia for Hip and Knee Replacement Surgery

This brochure will give you information about anaesthesia for hip and knee replacement surgery. If you have any questions, you should ask your specialist or relevant health professional.

If you need to undergo hip or knee replacement surgery, preparation will help to ensure that the experience is a positive one.

The aims of this pamphlet are to:

- Provide you with necessary information about anaesthesia for hip or knee replacement surgery
- Encourage you to ask questions of your anaesthetist
- Help you approach the planned procedure positively

Types of surgery

Joint replacement surgery is a common and effective procedure for relieving severe joint pain and loss of function. The most common types of hip replacement surgery include total or partial hip replacements, and the most common types of knee replacement surgery include total or partial knee replacements and kneecap replacement.

You are in good hands

Australia is one of the safest places in the world to have an anaesthetic. Specialist anaesthetists in Australia are highly trained medical specialists. They have gone to medical school, completed an internship and spent at least five years undergoing specialist anaesthetic training. Training includes anaesthesia, pain management, resuscitation and the management of medical emergencies.

Before the surgery

Your anaesthetist will want to know about your medical history. This may include seeing them in their rooms or a telehealth consultation before the date of your surgery. You might need further tests or consultations with other medical and health specialists before your surgery. Although these tests and investigations may delay your surgery, having you in the best condition prior to surgery is crucial to a successful outcome and to your long-term health. Sometimes there may be a delay between your consultation and the date of your surgery. You must notify your anaesthetist if you develop any new medical conditions during this time.

Your medications

Most medications can continue up until surgery. Blood thinners and diabetic medication require special consideration and you will be given specific instructions



on what to do with these medications. If you are unsure, please ask your surgeon or your anaesthetist.

Preparation

Before your surgery, you will need to fast and not consume food or clear liquids. Generally, this is no food six hours prior to surgery and no clear liquids for two hours, however your anaesthetist will discuss this with you before the procedure.

What to expect

There are a number of different anaesthesia techniques that can be used for people having hip or knee replacement surgery. These techniques can also be used in combination.

Local Anaesthesia: A local anaesthetic drug is injected at the site of the surgery to make you numb. This is usually done in combination with a general anaesthetic or regional anaesthesia to provide you with pain relief after the surgery

Regional Anaesthesia: A regional anaesthetic involves injecting numbing medicine around nerves (a 'nerve block') or the spinal cord. A nerve block is usually done to provide you with pain relief after surgery. Injecting numbing medicine around the spinal cord is known as 'spinal anaesthesia'. Many surgeries are done under spinal anaesthesia. You will be awake but feel no pain.

Sedation: This is sometimes called 'twilight anaesthesia' and is medication given intravenously to make you relaxed and drowsy. This is not the same as general anaesthesia and sometimes people remember parts of the operation, particularly conversations. Sedation can be given in combination with regional or spinal anaesthesia.

General Anaesthesia: General anaesthesia is what people describe as 'going to sleep'. The anaesthetist will insert a cannula into your vein and attach fluids (a drip). Before going under a general anaesthetic, you will usually be asked to breathe oxygen through a mask. Anaesthetic medications are usually given through the cannula to start the anaesthetic. Once you are fully 'asleep' a breathing tube will be placed in your windpipe to help with your breathing during surgery. Your anaesthetist will keep you 'asleep' and monitor you during the entire operation. It is normal to feel drowsy as you wake up.

Sometimes extra monitoring needs to be used, such as an arterial line. An arterial line is a special type of cannula that is inserted into an artery and is usually used to closely monitor your blood pressure during and after surgery. You may also have a central line inserted. Central lines are inserted via the neck, chest or groin into large veins in your chest and abdomen. A urinary catheter, which drains your bladder may also be placed. These extra lines may be inserted once you have been anaesthetised.

At the end of the operation, your anaesthetist will transport you to the recovery room where you will be cared for by specially trained nursing staff. In some settings you will be transferred to the High Dependency Unit (HDU) or Intensive Care Unit (ICU).

Post-Surgery

It is normal to feel drowsy as you wake up. If you have had a regional anaesthetic, you might notice that your legs or part of your leg is numb or cannot be moved. This is normal and will pass. You may also experience some discomfort, pain or nausea. There will often be medications to treat these given to you on a regular basis. If they are not improving your pain or nausea, please ask your nurse for extra medication. You may also notice a dry or sore throat or have a headache. However, this usually passes in 1-2 days. Generally, you can expect to stay in hospital one to seven days after surgery. Please confirm this with your surgeon and/or anaesthetist before you have surgery.

If you have had sedation or a general anaesthetic and are returning home on the day of the surgery, you must have an adult with you for 24 hours after the procedure. For safety reasons it is important that you refrain from the following for up to 24 hours after receiving the anaesthetic: drinking alcohol, driving a car, operating machinery.

Risks to be aware of

Major complications with anaesthesia for hip and knee replacement surgery are uncommon when anaesthesia is administered by a specialist anaesthetist.

Minor risks can include bruising, fatigue, sore throat, headache, sleep disturbances afterwards, drowsiness, muscle pains, nausea and vomiting.

While extremely rare, serious side effects such as severe allergic reaction, heart attack, stroke, seizure, lung damage, pneumonia, damage to the vocal cords, nerve damage, bleeding or infection exist. Remember that the risks of these more serious complications, including death, are very rare.

You are encouraged to ask your anaesthetist any questions you may have. They will be more than happy to answer them and discuss the best management plan approaching your surgery

The brochure provides general information about anaesthesia for hip and knee replacement surgery. It is not a substitute for advice provided by your specialist about your personal treatment plan.

Every effort is made to ensure that the information is accurate and up to date. However, we do not guarantee or warrant the accuracy or completeness of the information provided.

This information may change with time due to advancements in clinical research and knowledge. Use this brochure only in consultation with your specialist.

Copyright in this brochure belongs to the Australian Society of Anaesthetists Limited (ASA). All or part of this brochure must not be used, adapted, reproduced or distributed for commercial purposes without written permission from the ASA.

We prefer our members to link to our website rather than print or republish our materials on your own website to ensure you have access to the most up-to-date version. For the latest version, please visit <https://asa.org.au/member-resources><<https://asa.org.au/member-resources>>.

Last reviewed 25/03/23.

