

Anaesthesia for joint replacement surgery

Joint replacement surgery is a common and effective procedure for relieving disability due to severe joint pain and loss of function.

The surgery involves removing a damaged joint or part of it – such as a knee, hip or shoulder – and putting in a new one. An orthopaedic surgeon is usually the person who does joint replacement surgery, and may either replace the damaged joint with a prosthesis, or replace or fix only the damaged parts.

The anaesthetist will consider several factors when planning your anaesthesia, including:

- Past experience with surgery.
- Health and physical condition.
- Reactions or allergies to medicines.
- Risks of each type of anaesthesia.
- Preferences of your surgical team.
- Your preferences.

Regional anaesthesia is the most common form of anaesthesia used during joint-replacement surgery because it aims to provide optimal pain relief while minimising side effects such as sedation, post-operative nausea and vomiting, and leg weakness.

It may be used on its own or combined with sedation or general anaesthesia.

Regional anaesthesia numbs the part of the body where the surgery will happen. It involves the injection of local anaesthetic around major nerve bundles supplying body areas, such as the thigh, ankle, forearm, hand, shoulder or abdomen. This is sometimes done using a nerve-locating device, such as a nerve stimulator, or ultrasound, so that the anaesthetic can be delivered with greater accuracy.

Once local anaesthetic is injected, you may experience numbness and tingling in the area supplied by the nerves and it may become difficult or impossible to move that part of the body.

BEFORE THE OPERATION

It is important that you speak to your doctor about when you should stop eating and drinking before your anaesthetic.

The anaesthetist will also need information such as:

- Any recent coughs, colds or fevers.
- Any previous anaesthetics or family problems with anaesthesia.
- Abnormal reactions or allergies to drugs.
- Any history of asthma, bronchitis, heart problems or other medical problems.
- Any medications you may be taking.

WHAT TO EXPECT

Each surgery is different. How long an operation takes depends on how badly the joint is damaged and how the surgery is done. The duration of the anaesthesia depends on which anaesthetic is used, the region into which it is injected, and whether it is maintained by continual doses or repeated injections.

After surgery, you will be moved to a recovery room for a period of time until you are ready to be returned to the ward.

Typically, numbness can last several hours but may last several days. Generally, the “heaviness” wears off within a few hours but the numbness and tingling may persist much longer.

As the local anaesthetic effect wears off, numbness will diminish and surgical pain may return, in which case your doctor will prescribe alternative methods of pain relief, including injections or tablets.

Because osteoarthritis is often found in hips and knees, and patients undergoing hip or knee replacements are often elderly, there may be complications. Many joint-replacement patients have other medical conditions – diagnosed and undiagnosed – such as high blood pressure and heart problems, which require assessment and investigation.

Most patients undergoing joint replacement tend to accept the risks involved because of the potential improvement in their quality of life.