

Anaesthesia for Shoulder & Upper limb Surgery

Before Surgery

Fasting

No food for 6 hours before surgery. You can drink clear up to 2 hours before surgery (no milk or thickened fluids).

Arrival time

The admissions nursing team will call you to advise what time to arrive at the hospital and what to bring.

Medications

You can take all your usual medications with the exception of the following:

1. **Blood thinners** - All blood thinners will need to be discontinued prior to surgery with the exception of aspirin which can continue. These include: Warfarin, Pradaxa (Dabigatran), Eliquis (Apixaban), Xarelto (Rivaroxaban), Plavix (Clopidogrel).
2. **Diabetic medicines**
 - No diabetic tablets on the day of surgery
 - “Flozins” should ideally be stopped 3 days prior. These include: Jardiance, Jardiamet, Xigduo and Forxiga.
 - Insulin - Reduce long acting insulin by 50% the night before, no insulin on the day of surgery.
3. **Weight loss** and or diabetic medicines: **Ozempic** (Semaglutide), Bydureon (Exenatide), Saxenda (Liraglutide), Mounjaro (Tirzepatide), Trulicity (Dulaglutide). Please ensure you notify your anaesthetist if you are taking these.



Preoperative medical and anaesthetic review

The preoperative nursing team will contact you before surgery and your medical history will be recorded. You will be provided details on how to prepare for surgery and arrival times. Your anaesthetist will also call you directly and discuss the anaesthetic plan in detail. This is often not until the day or evening before surgery. You will have an opportunity to ask questions and discuss any concerns or questions that you may have. An outline of the usual anaesthetic plan is listed below.

Anaesthetic Plan

The anaesthetic is a combination of general anaesthetic combined with local anaesthetic. This approach ensures adequate levels of comfort in the early post-operative period. This is the usual approach but can be modified for each individual after discussion with your anaesthetist.

1

GENERAL ANAESTHETIC

You will be fully asleep during surgery with additional brain wave monitoring to ensure correct dosage

2

LOCAL ANAESTHETIC

Local anaesthetic will be administered under ultrasound guidance while you are asleep to improve your comfort after surgery

3

PAIN MEDICATIONS

A combination of simple and strong medications will be required

The **general anaesthetic** will be delivered intravenously through a drip in your arm. This will be guided by a special brain wave monitor (3 sticky dots on your forehead) which will display how asleep you are at all times during the surgery and assist in fine tuning your anaesthetic dosage.

The **local anaesthetic** will be administered under ultrasound guidance when you are asleep. This is called a “**nerve block**” and will result in a partially numb shoulder and arm to improve your comfort levels. The numbness is typically partial but your whole arm and hand may become fully numb for a temporary period. Occasionally the ear or side of your neck will also feel numb and a slightly droopy eyelid may result from the local anaesthetic.

The nerve block will last approximately 12 to 24 hours. When it starts to wear off, normal movement and sensation will return and your operative site will begin to feel uncomfortable. It is important to take addition pain medicine tablets as soon as you feel uncomfortable. Your anaesthetist will discuss this in more detail with you.

After surgery

The first night should be comfortable due to the effects of the nerve block. Once this wears off however, your shoulder will begin to feel uncomfortable and this may become severe if not treated promptly with additional pain medication. The following medicines are typically prescribed but this can be altered after discussion with your anaesthetist.

Pain medications

Paracetamol	Regular simple pain relief until you are comfortable
Celebrex	As tolerated, up to 2 weeks initially then only as required for 2 weeks
Palexia (Tapentadol) SR	Sustained pain relief medicine 50mg or 100mg twice daily
Palexia (Tapentadol) IR	For strong pain relief when needed: 50 or 100mg every 4 hours.

Side effects

Paracetamol should not produce any side effects but never take more than prescribed. Celebrex is usually well tolerated but tell your anaesthetist if you have had any adverse reactions to anti-inflammatory medications in the past or suffer from kidney problems or gastric ulcers. Tapentadol may cause drowsiness, dry mouth, itch and constipation. Repeated doses may accumulate and cause nausea. All these side effects will resolve once the medication is reduced or stopped.

Occasionally patches of altered sensation in the arm or hand may persist longer than than 1-2 days. This may result from the effects of the surgery, your positioning during the operation or from the nerve block itself. If normal sensation has not fully returned within 2-3 days, it may take several weeks to completely resolve. Please notify your surgeon or anaesthetist if you have any concerns. Significant nerve injury resulting in weakness of the arm or hand is rare.

Anaesthetic risks

Safety is the primary focus of your anaesthetic care. Overall anaesthesia is very safe with a low risk of significant complications. Multiple precautions will be taken to reduce your risk of complications but these may not eliminate all risks. Please refer to the information below for more details.

ANAESTHETIC SAFETY & RISKS

Anaesthesia is delivered in a highly controlled environment with several safety monitors and significant complications related directly to the anaesthetic are very uncommon. If you have any specific concerns, please discuss these directly with your anaesthetist. Below is a list which covers most of the important considerations relating to anaesthesia but is not fully comprehensive and does not include specific surgical risks

Common

Nausea, drowsiness, dry mouth, sore throat, sleep disturbance
Pain on awakening - this will be treated immediately in the 'recovery room'
Dizziness or lightheadedness
Difficulty urinating in the first evening after surgery

Uncommon

Persistent severe pain on awakening or in the early postoperative period
Confusion, disorientation, and hallucinations are possible but not common
Dental injury (0.1%)
Eye abrasions or red painful eye (0.5%)
Postoperative DVT (blood clot in veins in the leg) or PE (blood clot in the lung) (0.65%)
Transient nerve dysfunction (~5%) - persistent numbness/tingling 24-48 hours. This may occur as a result of surgery, anaesthesia (nerve blocks) or positioning

Rare

Airway emergency under general anaesthetic (1 in 5,000 to 1 in 10,000)
Aspiration of stomach contents into lungs causing pneumonia (1 in 3,000)
Accidental awareness of events during surgery when under 'general anaesthetic' (0.1%)
Allergy to medications (1 in 800 to 10,000)
Permanent nerve injury (1 in 3000)
Bleeding related to a nerve block or injection (1 in 500)
Stroke, heart attacks and pneumonia rare (<1%)
Death related directly to anaesthesia very rare (3 per million population per annum)