Why should I have a block?
Shoulder surgery may cause considerable pain in the first 24 hours after the operation. One of the most effective methods of relieving this pain is to use a procedure called an Interscalene Brachial Plexus Block, which numbs the nerves carrying pain sensation from the operation site.

Your operation can then be done under block alone or in combination with sedation or a general anaesthetic.

What are the benefits of a nerve block?
Benefits of a nerve block may include a shorter recovery period and better pain relief. You may not need as many strong pain-relieving medicines like morphine. This will help reduce your risk of the side effects associated with these medicines such as nausea (feeling sick) and drowsiness.

What are the benefits of staying awake?
The benefits of staying awake for your surgery are that you will avoid the risks and potential complications or side effects of a general anaesthetic eg drowsiness or nausea. If you have a heart or lung condition, it may be safer. If you have diabetes, you can get your diabetic control back to normal quicker because you will be able to eat and drink sooner than if you have a general anaesthetic. If you do not have a general anaesthetic, you can eat and drink as soon as the operation is over and you are back on the ward. See the “You and your anaesthetic” information sheet. For keyhole operations, where the surgeon puts a tiny camera into your joint, you can watch the procedure on a television screen if you wish to. You do not have to and can choose to have a little sedation to make you slightly sleepy if you prefer.

What is the Interscalene Brachial Plexus?
The nerves that supply your shoulder and arm come from the spinal cord in your neck. They form a bundle in your neck and then run under the collar bone (clavicle) through your armpit to supply your arm. This bundle is the Brachial Plexus. The part of the Brachial Plexus that supplies your shoulder sits in a 'groove' in your neck called the Interscalene groove.

How is the block done?
It is usually performed while you are awake although you may be given a sedative first. For shoulder surgery, this local anaesthetic nerve block is usually performed in the lower neck.

It is necessary to identify where the nerves are before they can be successfully blocked.
This may be done with the aid of a nerve stimulator which passes a tiny electrical current through a special needle (no larger than a needle for taking blood). When this needle is next to a nerve, the muscles to which the nerve goes will twitch – a surprising sensation, but not one that is usually painful. These muscles may be in the shoulder, the arm or even the front of the chest.

Alternatively, the nerves may be found by using an ultrasound machine (in the same way they look at babies in pregnant women). See fig. 1.

When the needle is accurately located, local anaesthetic solution is injected through the same needle, which produces numbness in the shoulder and arm (especially on the thumb side) usually for 8 to 18 hours (there is considerable variation) abolishing pain.

You will be unable to move your arm during this time – it will feel like a 'lump of lead', similar to the feeling in the jaw after a local anaesthetic at the dentist.

Care of your arm while it is numb
You need to pay special attention to not accidentally damage your arm while you...
Interscalene Brachial Plexus Block for shoulder surgery

Patient Information

can't feel it. Please refer to the leaflet 'Looking after your arm and hand after a block' for more information. You may find it easier if you bring loose clothes that will be easy to put on using only one arm ie no difficult buttons or zips. Slip

Fig. 1 An ultrasound guided brachial plexus block

on shoes rather than ones with laces or buckles are also recommended.

What problems can occur following a block?

There are occasional problems from this procedure, as with anything we do in medicine. Most of these last only as long as the local anaesthetic lasts. Damage to nerves, blood vessels and other structures is rare.

Common side effects of Interscalene Brachial Plexus blocks, which only last as long as the numbness of your shoulder, are drooping of the eyelid on the side of the block (this does not normally affect your vision), flushing of the face, hoarseness of the voice, occasionally a feeling of not being able to take a deep breath and pins and needles in your hand.

What is the risk of nerve damage?

There is a small risk of nerve damage. This may result in numbness, strange sensations, pain or very rarely weakness in a muscle.

The most frequent (but still uncommon - less than 3%) nerve problem is altered sensation in part of the arm or hand, which may persist for some weeks, which usually resolves on its own. Long-term nerve problems are very rare indeed (around 1 in 5,000 to 1 in 30,000 nerve blocks).

What happens if the block doesn't work?

Occasionally, (less than 1 in 100) the block is unsuccessful. You will then be given an alternative anaesthetic and another form of pain relief for after the operation.

What happens when the block wears off?

When the block starts to wear off you may feel pins and needles in your arm or hand, which gradually disappear. It is important that you start taking your painkillers by mouth before you start to get pins and needles to make sure you are comfortable when the block wears off.

Please contact us if you have any further questions or develop any of the side effects mentioned above.