

Patient education: Suprascapular nerve block

WHAT IS IT?

Suprascapular nerve block (SSNB) is an injection behind the shoulder near to the shoulder blade to numb a nerve to the shoulder. It can reduce shoulder pain for weeks to months after the injection. If cryotherapy or pulsed radiofrequency are added the benefit may last 3-9 months.

HOW IS IT DONE?

The needle is guided to the nerve using either an X-ray or ultrasound machine (see picture for ultrasound technique). It can be done sitting up awake outside the operating theatre or in the operating theatre with sedation to make the patient sleepy. The nerve is injected with local anaesthetic and anti-inflammatory steroid (cortisone). Sometimes the nerve can also be frozen (cryotherapy) or treated with a magnetic current (pulsed radiofrequency- RF) to attempt to get longer-lasting pain relief. Cryotherapy and pulsed RF are done in an operating theatre.

The nerve is mostly a sensory nerve so numbing it reduces pain but doesn't produce any significant shoulder weakness.

WHAT ARE THE BENEFITS?

This can reduce shoulder pain for weeks to months.

WHAT ARE THE RISKS?

Overall this is a very low risk procedure.

The most common risk is that the procedure may not help, or may only help for days instead of weeks- months.

Sometimes people can have temporary adverse reactions to the cortisone, such as mood changes or difficulty sleeping for a day or two.

Rare risks include bleeding, infection and a very rare risk of punctured lung.

WHAT IS PULSED RADIOFREQUENCY TREATMENT?

This is a procedure which is sometimes added to the block in order to get a longer duration of benefit. It is usually done in the operating theatre with some sedation to make the patient sleepy.



It involves producing a strong magnetic current in the tip of the needle, next to the nerve, which “stuns” the nerve and may reduce pain for months after. In order to find the nerve there may be some electrical current from the needle which will produce a tingling or twitching sensation when the needle approaches the nerve.

Sometimes an ultrasound machine is used to direct the injection.

This is also a very low risk procedure, with risks similar to the above block. This procedure cannot be done on patients with implanted pacemakers or defibrillators due to the magnetic current involved interfering with these.

WHAT IS THERMAL RADIOFREQUENCY?

This involves permanently destroying the nerve by heating the tip of the needle. This can produce permanent pain relief. It is usually only done in patients who are elderly and with severe pain as destroying the nerve can occasionally make pain worse, and destroying the nerve commonly causes an increase in pain for days to weeks after.

WHAT IS CRYOTHERAPY?

Cryotherapy involves freezing the nerve with a larger needle which forms an “ice ball” on the nerve. This also aims to produce a much longer lasting benefit than the single injection (6 months to a year). It is also done in the operating theatre with some sedation.

Cryotherapy uses a larger needle than the other procedures so there is more likelihood of producing bruising.

