Stellate Ganglion Block

What is a Stellate Ganglion Block?

The stellate ganglion is a bundle of nerves in the neck that are part of the body's Sympathetic Nervous System. The stellate ganglion helps to transmit pain impulses from areas located in the head, neck, upper arm and chest areas to the brain, where the sensation is experienced.

A stellate ganglion block is an injection targeting these nerves to reduce pain transmission, thereby reducing severity of specific types of pain conditions.

Why do I need this procedure?

This block provides pain relief in conditions where the sympathetic nervous system is a likely contributory cause.

It is usually (but not exclusively) administered for the following conditions:

- Complex Regional Pain Syndrome (CRPS)
- · Herpes Zoster/herpetic neuralgia
- · Shoulder/hand pain syndrome
- Refractory angina



What are the preparations?

Your pain specialist will review your history and examine you prior to deciding if a stellate ganglion block is appropriate to address your pain.

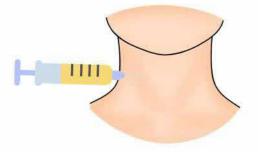
Please provide your doctor with accurate and complete information regarding:

- Medical issues
- Current medications, especially blood thinners
- Allergies
- · Previous procedures, and
- Pregnancy or possibility of pregnancy

Specific instructions regarding fasting and your medications will be given to you separately, and should be followed closely as this allows us to perform the procedure as safely as possible.

How is a stellate ganglion block performed?

- They are usually performed under X-Ray or ultrasound guidance to minimise the risk of complications. You might be given sedation to reduce your anxiety and discomfort associated with the procedure.
- The area to be injected (front of the neck) will be cleaned thoroughly
 with an anti-septic solution. Local anaesthetic will be injected under your
 skin to reduce the discomfort from the block needle.
- The block needle is then guided to an appropriate location with ultrasound or under X-ray guidance, and local anaesthetic (numbing mediation), with or without corticosteroid (anti-inflammatory medication), is then injected near the stellate ganglion, numbing the nerves there.

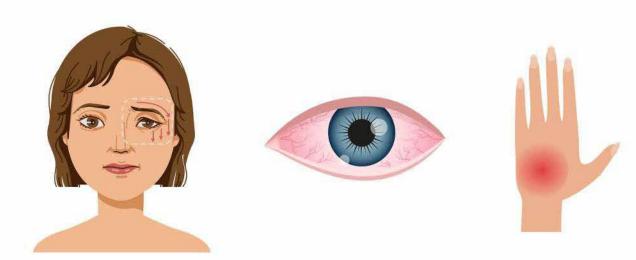


What are the risks and complications of the procedure?

Stellate ganglion blocks are generally safe, with a low risk of severe complications.

Common side effects:

- Droopy or red eye on the side of injection
- Temporary temperature increases in the affected area/hand
- Temporary hoarseness of voice
- Tenderness, swelling or bruising around the injection site
- Temporary difficulty with swallowing



Rare but serious complications:

- Infection around the injection site
- Bleeding
- Inadvertent spinal or epidural block (difficulty breathing, numbness of the chest, trunk and limbs)
- Injury to surrounding nerves and other structures, including possible pneumothorax (collapsed lung) resulting in breathlessness
- Severe drug allergies
- · Local anaesthetic toxicity
- Seizures

What can I expect after the procedure?

- You will be monitored for some time prior to discharge back home or to the ward. Your vital signs will be taken regularly and our nursing staff will discuss some post-procedure instructions with you.
- If you are being discharged home, you should be accompanied home by a responsible adult and you must not drive home by yourself.
- Some soreness is expected at the site of injection initially, but should improve.
- Keep the injection area clean and dry for the next 2-3 days.
- Most patients have significant, but not total, relief after a stellate ganglion block.
- If corticosteroids are given, you might experience some pain recurrence initially when the local anaesthetic wears off. This should improve after 2-7 days once the corticosteroids start to take effect.
- Your doctor will review you after the procedure to assess its effectiveness and counsel you regarding further management.

What are the other options?

Your pain specialist will discuss other therapeutic options to address your pain as indicated.

These may include medications, physiotherapy, psychological intervention, surgery, or a combination of any of these modalities.



Contributed by Department of Anaesthesia

