

Stellate Ganglion Block 星狀神經節阻滯止痛法

Introduction

Stellate ganglion is a constellation of sympathetic nerve fibres and ganglions located on either side of the front of the neck. It controls the amount of blood flow to the head and upper limbs. Sometimes it affects pain sensation from these areas.

Stellate ganglion block is used to diagnose and/or treat conditions that compromised blood circulation or cause pain in the arm, chest and head. The block may be repeated and other drugs (steroids or neurolytic agent) may be injected to achieve a more long-lasting effect.

The Procedure

- The procedure is usually done in the operating room under sterile condition.
- The procedure is usually performed under local anaesthesia. Sedative agent may be administered
- A small cannula is first inserted into your vein.
- You will lie on your back with a small support under your shoulders.
- Please keep still and avoid talking, coughing or swallowing during the procedure to avoid any complication.
- After disinfecting the skin in your neck, the doctor will insert a small needle.
- X-ray (with contrast) or ultrasound may be used to confirm correct needle position.
- After local anaesthetic is injected, an adhesive bandage will be applied.
- The injection takes a few minutes, but the whole procedure (including preparation and positioning) may take about 30 minutes.

Risk and Complications

Generally, the procedure is safe. Like all other procedures, side effects and complications could occur, although in most cases these are uncommon and not serious. However, serious and potentially life threatening complication could occur in rare occasions.

You may have drooping of eyelid, redness in conjunctiva and stuffy nose. However, this is normal and indicates the block is successful. They are usually transient and will resolve when the local anaesthetics wear off.

Common risks and complications

- Hoarseness of voice
- Pain at needle insertion site.
- Allergic reaction to medications and contrast injected but serious reaction is rare

Uncommon risks and complications

- Adverse effects related to steroid use are usually self-limiting because it is

usually used in a low dose. These include facial flushing, insomnia, nightmares, nervousness and increased glucose level in diabetes. Whether low dose steroid leads to avascular necrosis remains controversial.

- Significant bleeding and hematoma formation
- Local anaesthetic related convulsion, arrhythmias or death.
- Pneumothorax. (Introduction of air into the cavity between the chest wall and the lungs due to needle puncture leading to shortness of breath. In severe cases a chest tube is inserted to drain the air. However most cases are mild and spontaneously resolve with oxygen treatment.)
- Nerve injury to the nerve plexus during injection.

Rare risks and complications

- Bacterial infection

Before the Procedure

- You may be requested to fast for at least 6 hours before the procedure.
- You should inform the medical staff of any past allergy, medical conditions and medications that you are taking, especially blood thinning medication (e.g. warfarin, clopidogrel).
- Ask your doctor whether you should continue your regular medication on the day of the procedure.
- Inform your doctor or nursing staff if you are, or think you may be pregnant.
- If you feel unwell on the day of procedure, please inform the Hospital to postpone the procedure.

After the Procedure

- You may resume oral intake only after being assessed by the nursing staff.
- If sedative has been used, you should avoid operating heavy machinery, signing legal documents or drive for the rest of the day.
- You should be accompanied by a family member or friend.

Follow Up

- A pain clinic follow up appointment will be arranged.
- In case there are any serious adverse effects or complications after the procedure, you should seek urgent medical advice.

Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor.

*Reference of occurrence rate

Very common	Common	Uncommon	Rare	Very rare
1 in 10	1 in 100	1 in 1000	1 in 10,000	1 in 100,000