

A stellate ganglion is the name for a collection of nerves located in your neck by your voice box (larynx). They are part of the sympathetic nervous system that supply the face and arm, they are not involved with movement or sensation. However, if one of the ganglion nerves is damaged or hurt by trauma or infection a pain feeling may result from the sympathetic system reaction. In this case a stellate ganglion nerve block can be performed to stop the pain.

### **Before your stellate ganglion block**

You will need to come in to hospital to have a stellate block. You will need to fast before the procedure – you should not eat for 6 hours before the procedure and after that should only have clear fluids (water) up until two hours before your appointment time at the hospital.

If you have a 1pm appointment this will mean a light breakfast before 7am and clear fluids up until 11am.

You should take all your medication as normal, apart from diabetic medicine and anti-coagulants. Your blood must be clotting normally to have this procedure safely. You must advise the pain service of any diabetic or blood thinning medication that you take and we will advise you (and your doctor/s if appropriate) on what you need to do.

When you arrive to hospital you will be met by a staff nurse. A fine tube may be placed in a vein in your arm (IV cannula) before your procedure. This may be used to give you fluid and medications.

You will lie on your back during the procedure so the doctor can clearly see the front of your neck. The doctor will use a cleaning solution on your skin.

Some local anaesthetic (numbing medication) may be injected around the area of the nerve (by your voice box). The local anaesthetic can sting a little at first and then you will feel numb. Through this numb area the doctor will inject the block medication to the ganglion nerves. This medication numbs the nerve for a longer period of time than local anaesthetic does. During the procedure the doctor may ask if you are ok, please try to respond with a hand gesture rather than talking.

At the end of this procedure you will wait in the recovery area for 30 – 60 minutes to check you have not had any adverse effects from the block. During this time you may develop hoarseness of your voice and sometimes have arm weakness. These symptoms are temporary.

### **Possible complications**

The stellate ganglion is located deep within the neck and close to major blood vessels and other nerves. It is possible the following complications may occur;

**Loss of consciousness:** during the injection a small amount of the anaesthetic may enter a blood vessel. If this happens you may lose consciousness for a short time. This is why the doctor may ask if you are ok during the procedure. This is a treatable complication that should not have any long term problems.

**Voice hoarseness** is a common occurrence as the stellate ganglion is located close to the voice box. It

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is important to be careful eating and drinking for several hours after your procedure as you may accidentally inhale food or fluid to your lungs. As your voice clears this will no longer be an issue. We recommend trying small sips of water first and if you have difficulty swallowing please wait a few hours before trying again.

**Bruising** on your neck around the site of the injection is common and will heal within a few days.

When a stellate block has been successful you may get some drooping of your eyelid on the same side as the injection. This will only last a few hours. It happens because the stellate ganglion supplies the nerves to your eyelid.

**Infection:** As with any injection through the skin there is the chance of bacteria gaining entry. This is why the doctor will use a cleaning solution on your skin first.

### **Less common but significant risks**

these include:

**Pneumothorax.** Air inside the chest cavity causing the lung to collapse. This would present as severe chest pain and difficulty breathing. You should immediately attend the Emergency department in this eventuality.

**Seizure (fit)**

**Brachial Plexus block** (Temporarily numb arm, lasting a few hours)

**Spinal or epidural block** (temporarily numbness or weakness from the neck down)

**Nerve damage**

**Allergy:** It is possible you may have an allergic reaction to the medication used. This is an extremely rare occurrence. If it does happen you

may feel hot, have a swollen tongue or develop a rash. Please tell your doctor immediately if any of these symptoms occur.

Very rarely the needle used to inject the block may puncture your airway, causing a small amount of air to sit in your chest (called a pneumothorax). This may require further treatment, which your doctor can explain for you.

### **Note**

The procedure cannot be performed if you have an active infection, flu, cold, fever, other unstable illness and very high blood pressure or if your blood is not clotting normally. This is for your safety!

### **Aftercare**

A stellate ganglion block is usually completed as an outpatient. This means you will be able to go home on the same day as your procedure. Please make sure you have a responsible adult who can assist you during and after your procedure. We strongly suggest you do not drive yourself home after your procedure, please arrange your transport home before you arrive to hospital.

## **Contact us**

Wellington Regional Pain Service  
Department of Anaesthesia  
Phone: 04 385 5344

Or you can contact **HealthLine**, a free health information service. 0800 611 116