

Patient Information - Stellate ganglion block

What is a stellate ganglion block?

A stellate ganglion injection is one method of providing pain relief for certain conditions affecting the arm, head and neck. The term 'stellate ganglion' refers to one point on a chain of sympathetic nerves in the neck. The sympathetic nerves are responsible for controlling the automatic functions of our body, including our heart rate, blood pressure and skin temperature. They prepare the body for emergencies – the so called 'fight or flight' response. It seems that the sympathetic nerves also act to increase and maintain pain long after an injury has healed. The nerves that go to the head, chest and arms join to form what is known as a ganglion in the neck. By 'blocking' or stopping the action of the sympathetic nerves in this area, by injecting them with local anaesthetic, pain may be relieved.

Benefits

Pain in the head, chest or arm that is controlled by the stellate ganglion ('sympathetic maintained pain') may be alleviated by the block.

Risks

Unfortunately no procedure is risk free. There may be some temporary discomfort at the site of injection, infection and bruising. There is a possibility that you may have an allergic reaction to the drugs used. Often patients experience flushing (redness) together with a slight drooping of the upper eyelid on the side of the injection. These effects are normal and only temporary. They indicate that the block is working well. A small nerve supplying the vocal cords may be numbed by the local anaesthetic. If this occurs you may experience some temporary hoarseness in your voice and an odd feeling on swallowing. This is temporary and will fully recover.

A more serious problem is the risk of convulsions if the drug is deposited in a blood vessel that carries blood directly to the brain. The problem however is very rare but it can mean having to stay in hospital overnight. Very rare side-effects include nerve-damage and spinal cord damage resulting in permanent neurological problems; a puncture in the lung lining resulting in collapse of lung (pneumothorax).

Before the procedure

- You will have the treatment as a day case.
- You are advised not to eat or drink for about 4 hours prior to the planned procedure.
- You should arrange for someone to drive you home after the procedure.
- Although the procedure as such takes only about 15 minutes, your stay may vary between two to four hours
- Please bring a list of your current medications with you. If you are on medicines such as warfarin or clopidogrel please do inform the doctor. After liaising with the doctor, these blood thinning medicines need to be temporarily stopped prior to the procedure. If you were on warfarin you will have to undergo a blood test in the morning to ensure your blood clots normally.

- You will be asked to undress and put on a theatre gown (you can leave your trousers on).
- Your doctor will discuss the procedure with you and ask you to sign a consent form.
- As the procedure involves the use of x-rays female patients will be asked for details of their last menstrual period. If there is any possibility that you may be pregnant please inform the doctor or nurse.

The procedure

- The procedure is carried out under x-ray screening. This allows the doctor to identify the specific level in the neck to be treated.
- Once you are in the correct position (lying on your back or semi-reclining) the doctor will clean your front of the neck with an antiseptic solution which may feel cold.
- A local anaesthetic will be injected at the site of the procedure. This may sting initially before the skin goes numb.
- It is important that you keep still during the procedure as the delicate needle will be carefully inserted into the side of the neck. A contrast (a dye-solution which shows up under x-ray) is injected to confirm the position of needle.
- The local-anaesthetic will then be injected into the neck and a feeling of tightness may be felt.
- A small dressing will be placed over the needle insertion site. This can be removed in the evening.

Following the procedure

- After the procedure you will be taken to an area to recover.
- You will be asked to lay on the trolley for a short period and the nursing staff will assist you to sit up
- The nursing staff will observe you before going home.
- Please be careful when you first get out of the trolley – some may feel light-headed; ensure you are steady on your feet.
- Take your regular medication and pain killers as normal.
- There can be an initial exacerbation of discomfort before you start experiencing the pain relief. During this period, you may need to increase your pain killers or require stronger pain killers. Please see your GP or contact your doctor if current pain medicines are inadequate.
- A letter will be sent to your GP and a further appointment at the pain clinic will be sent to you.

Please ensure that you have arranged for someone to drive you home after this procedure. The information in this leaflet is not intended to replace your doctor's advice. If you require more information or have any questions, please speak to you doctor prior to the consent for the procedure.