

Stellate Ganglion Block

The Stellate Ganglion is a small bundle of nerves that transmits sympathetic nerve signals to the face and upper extremities (i.e. arms). These nerves are not the main nerves for feeling or movement. Instead, they regulate blood vessels and other nerves. Blocking the sympathetic activity by anesthetizing the stellate ganglion can help diagnose the cause of pain and may also give pain relief. A successful stellate block may reduce pain and swelling and increase range of motion in affected area(s). Successive sympathetic block procedures can provide greater and greater pain relief with each procedure.

How long does the stellate ganglion block take and what is injected?

The actual injection takes only a few minutes. The injection consists of a local anesthetic and may include steroid medication to prolong the effects of the stellate ganglion block.

Will the stellate ganglion block hurt?

The procedure involves inserting a needle through skin and deeper tissues. Most patients find this tolerable due to the local anesthetic. Some patients also receive intravenous sedation, which can make the procedure more comfortable. Most patients are awake and talking during the procedure.

How is the stellate ganglion block performed?

It is done under sterile conditions with the patient lying on stomach. The patient's blood pressure and oxygen level are monitored. The skin is cleaned with antiseptic solution and then numbed with a local anesthetic. Then X-ray is used to guide the needle into proper position along the outside of the spine and contrast dye is used to confirm its location. The medication is then injected gradually.

What should I expect after the stellate ganglion block?

After the procedure you may experience warming of the upper extremity and/or face, a droopy eye, redness of the eye, and hoarseness of the voice; all of these symptoms can collectively be referred to as Horner's Syndrome. This normal and means the nerves are blocked. These effects are temporary and last a few hours. Pain relief may or may not be immediate.

What should I do after the stellate ganglion block?

You should have a ride home. We advise patients to take it easy the day of procedure. You may perform activities that you can reasonably tolerate. After the block, it is a good time to go to physical therapy. Unless there are complications, you should be able to return to work the next day. The most common thing you may feel is soreness in the neck at the injection site.

How long the effect of the medication last?

The local anesthetic wears off in a few hours. However, the blocking of sympathetic nerves may last for many more hours. Usually, the duration of relief gets longer after each injection.

How many stellate ganglion blocks do I need to have?

If you respond to the first injection, you will be recommended for repeat injections to treat the problem. Blocks may be 1-2 weeks apart. The response to such injections varies from patient to patient. We gauge how many by how well the patient is doing.

Will the stellate ganglion block help me?

It is sometimes difficult to predict if the injection will indeed help you or not. The patients who present early during their illness tend to respond better than those who have had symptoms for a very long time. Patients in advanced stages of disease may not respond much.

What are the risks and side effects?

This procedure is safe. However, with any procedure there are risks, side effects and possibility of complications. The most common side effect is temporary pain at the injection site. Other less common risks include bleeding, infection, spinal block, epidural block and injection into blood vessels and surrounding organs. Fortunately, serious side effects and complications are uncommon.

Who should not have a stellate ganglion block?

If the patient is allergic to any of the medications to be injected, on a blood thinning medication, has an active infection going on near the injection site, or has poorly controlled diabetes or heart disease, they should not have the injection, and it may be postponed to a later time.