

What is the purpose of the procedure?

The stellate ganglion block is a procedure used to decrease pain in the upper limbs and sometimes the head and neck. The **stellate ganglion** is an area in the front of the neck where a group of the sympathetic system nerves come together. These nerves supply blood vessels to the scalp, face, neck, shoulder and arm and hand and are sometimes involved in chronic pain. The purpose of this injection is to diagnose if the nerves are involved in your pain. If they are involved a series of injections may be planned at a later time to reduce your pain.

What are the risks associated with this procedure?

The risks are infrequent. They include:

- Allergic reaction to the medication
- Nerve damage
- Bleeding and bruising at the injection site
- Infection
- Injection of medication into a blood vessel
- Puncture of surrounding structures including the esophagus
- No improvement or worsening of pain in some cases

Some possible temporary side effects include:

- Flushing of the face
- Hoarseness of voice
- Stuffy nose
- Bruising over the injection site
- Drooping of the eyelid (of side procedure was on)
- Difficulty in swallowing
- Smaller pupil (of side procedure was on)
- Slight difficulty in breathing

How should I prepare for the procedure?

- You must have a driver with you at the time of check in and check out. Your driver must accompany you to the clinic for your procedure. You can be discharged only to the care of a responsible adult driver 18 or older.
- Since you may receive sedation, it is important that you do not eat within 6 hours before the procedure. Small amounts of clear liquids are ok up to 2 hours before the procedure. If you have diabetes discuss an eating and medication schedule with your doctor.
- You may need to stop taking certain medications several days before the procedure. Please remind the doctor of all prescription and over-the-counter medications you take, including herbal and vitamin supplements. The doctor will tell you if and when you need to discontinue the medications.
- It is very important to tell the doctor if you have asthma or had an allergic reaction to the injected dye for a previous radiology exam (CT scan, angiogram, etc). An allergic reaction has symptoms such as hives, itchiness, difficulty breathing, or any treatment which required hospital stay.
- Tell the doctor if you develop a cold, fever, or flu symptoms before your scheduled appointment, or if you have started taking antibiotics for an infection.

What will happen during the procedure?

1. The stellate ganglion block is an outpatient procedure usually done in a special procedure room. For your safety and comfort, you will be connected to monitoring equipment (EKG monitor, blood pressure cuff, and a blood-oxygen monitoring device).
2. The doctor or nurse may start an intravenous line and give some medicine to help you relax. You will also have skin temperature monitors placed on your hands.

3. The doctor applies some pressure on your neck to determine exactly where to place the needle. It is very important that you do not talk, swallow or cough. If you have to swallow or cough, raise your hand to let someone know.
4. After the numbing medicine takes effect, the doctor inserts another needle under guidance of either a special x-ray machine called a fluoroscope or an ultrasound machine.
5. They will then inject a dye that shows up on x-rays (contrast solution) or saline to ensure the needle is in proper position. When satisfied with the needle position, the doctor will inject the numbing medicine (anesthetic).
6. It takes about 10 to 20 minutes for the medication to fully take effect. We will continue to monitor hand temperatures after the procedure is done to confirm that the block was successful.

What should I do after the procedure?

- Do not engage in any activities that require heavy lifting, balance and coordination.
- Do not drive the remainder of the day.
- You may resume usual activities and return to work the following day.
- If the doctor prescribes physical therapy, it is very important that you continue with the physical therapy program.

If you would like further information including videos of procedures, please visit our website: <http://www.umpain.com/>

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