Mid-Tennessee Bone and Joint Clinic

Facet Joint Injection and Medial Branch Nerve Block

The spinal vertebrae are the bones that support the neck and back. Each vertebra has facet joints (flat surfaces); they touch where vertebra fit together to support the spine. The spinal facet joints are true synovial joints like the hip, shoulder, and knee joints and are richly innervated by pain sensitive nerve fibers called medial branch nerves. Medial branch nerves are part of the nerve pathway to and from each facet joint to the brain. The facet joint in your back or neck can become inflamed (swollen and irritated), and develop arthritis causing joint pain. The pain message may then travel along the nerve pathway from the facet joints to your brain and cause you to feel pain in the neck or back region that sometimes radiates into the arm or thigh.

Facet or medial branch nerve blocks are injections into the facet joint or near the nerve, and they are performed to relieve back or neck pain. This procedure helps reduce pain and it helps physicians find out where the pain is generated. Many patients get significant relief from one or two injections. In some cases, it may be necessary to repeat the procedure.

Your doctor may use a medial branch nerve block procedure to see if you might respond to a therapeutic procedure known as radiofrequency neuroablation (lesioning). If the nerve block procedure reduces your pain for the duration of the local anesthetic (as early as the first hour to 15-24 hours), then the nerve can be coagulated with a radiofrequency heat current to keep certain pain messages from reaching the brain, reducing or relieving pain for the long term.

The Procedure

- You will lie on your back or stomach, depending on the approach the doctor will take and the location of your problem area.
- Fluoroscopy (video X-ray guidance) is used to help locate the correct lumbar vertebra, facet joint, and medial branch nerve, and a local anesthetic is used to numb your skin.
- Using video X-ray guidance, a thin needle is inserted into the facet joint or near the medial branch nerve.
- Contrast solution (X-ray dye) may be injected so the physician can see the painful areas and confirm the correct location of the needle tip.
- A local anesthetic solution (sometimes a steroid-anesthetic mixture) is injected near the painful facet joint and medial branch nerve bathing the area with soothing medication.
- The needle is removed and a bandage will be placed on the tiny area where the needle was injected for each level injected.

Instructions (Day of Procedure)

- Continue taking your medications as prescribed with the exception of blood thinners.
- If you are taking blood thinning medication, you will be instructed when to stop taking the medication. Medical clearance may be required prior to stopping some blood thinning medications.
- It is recommended you bathe with anti-bacterial soap before the procedure.
- Your procedure will take place at the Surgery Center of Middle Tennessee. You will be contacted and told when to arrive. Expect to be at the Surgery Center for approximately two hours.
- If you have any known allergic reactions to having medication injected, have an active infection, rash, or are pregnant, inform the doctor and/or nursing staff.
- Please bring your insurance card and driver's license.

NOTE: Patients are NOT permitted to drive themselves home after this procedure. Please make arrangements for someone to drive you home.

After the procedure

- After the procedure is completed you will be monitored in the recovery area. When your blood pressure, pulse, and breathing are stable, you should be discharged and able to leave with a responsible adult.
- You may experience discomfort at the needle placement site(s). This discomfort will subside over the next few days. Your legs or arms may feel slightly heavy and may be numb due to the local anesthetic. This sensation wears off in a few hours.

Risks: Generally speaking, this procedure is safe. However, as with any procedure, there are risks including, but not limited to: spinal puncture with headache, infection, bleeding inside the epidural space with nerve damage or worsening of present symptoms, allergic reaction, or no improvement in symptoms.

Possible Side Effects: The most common side effect is pain which is temporary. Other side effects include bruising, swelling, or soreness at the injection site, or transient weakness and numbness. If steroids are included in the injection, other side effects are related to the use of cortisone which can include weight gain, increased blood sugar, water retention, and suppression of the body's own natural production of cortisone.