

What is a medial branch block?

A medial branch block is an injection of an anti-inflammatory steroid (e.g., dexamethasone or triamcinolone) on the medial branch nerves that supply the facet joints. The facet joints, also known as the zygapophysial joints, are part of the bony framework of the spine. They are small bony projections from one vertebra meeting with similar bony projections from the vertebra above or below. Sometimes, due to a variety of acute and chronic conditions, the facet joints can become inflamed. For lower back (lumbar) facet joints, the pattern of pain is usually an aching in the low back, radiating across the lower back and slightly down the back of the buttocks and upper thighs. Usually, standing or bending backward worsens the pain. For neck (cervical) facet joints, the pattern of pain is an aching in the neck, slight radiation across the neck and shoulders, and worsening symptoms with turning the head from side to side or looking up.

How long does it take to do?

The actual injection takes only a few minutes. Please allow about an hour for the procedure; this will include talking to your doctor before the procedure, signing the informed consent, positioning in the room, and observation by the recovery room nurse afterwards.

What medicines are injected?

The injection consists of a mixture of local anesthetic (e.g., bupivacaine) and a small dose of the steroid medication (triamcinolone – Aristocort® or dexamethasone).

Will it hurt?

All of our procedures begin by injecting a small amount of local anesthetic through a very small needle. It feels like a little pinch and then a slight burning as the local anesthetic starts numbing the skin. After the skin is numb, the procedure needle feels like a bit of pressure at the injection site. If you experience any pain during the procedure, your doctor will inject more local anesthetic as needed. Will I be “put out” for this procedure? No. This procedure is done under local anesthesia.

How is it done?

It is typically done with you lying on your stomach for back injections and on your side for neck injections. Your blood pressure and oxygenation will be monitored. In addition to your doctor and the x-ray technician, there will be a nurse in the room at all times if you have any questions or discomfort during the procedure. The skin in the back is cleaned with antiseptic solution and then the procedure is done. Very small needles are placed along the bony landmarks that mark the location of

the medial branch nerves. A small volume, usually about 1 mL, is injected along each nerve.

What should I expect after the injection?

Shortly after the injection, you may notice that your pain may be gone or considerably less. This is due to the effect of the local anesthetic and lasts only for a few hours to a few days.

What should I do after the procedure?

We advise the patients to take it easy for a day or so after the procedure. Perform the activities as tolerated by you. This is a diagnostic test and it is important to maintain reasonably normal activities so the block's efficacy can be evaluated. Can I go back to work the same day or the next day? You should be able to unless the procedure was complicated. Your doctor or recovery room nurse will discuss this with you.

How long does it last?

This is a diagnostic test and the injection seldom lasts more than a few hours or a couple of days, at the most. This is normal. This injection is performed as a predictor of the efficacy of radiofrequency lesioning of these medial branch nerves.

How many injections do I need to have?

Usually just one in any region (lumbar, cervical, thoracic, etc.) Multiple levels are blocked simultaneously, usually on one side only. If relief is experienced on the injected side but not on the opposite side, the diagnostic block is a success. The next step is radiofrequency lesioning of the medial branch nerve.

How will I know if it will help?

It is very difficult to predict how helpful injections will be. Generally, patients who have the symptoms described above will do well. Obviously, since there are several pain generators in the spine, the degree of response will vary widely. If you do not obtain reasonable relief from this diagnostic injection, it is unlikely you will obtain relief from radiofrequency lesioning. Your doctor will discuss this with you.

What are the risks and side effects?

Overall, this procedure has very few risks. However, as with any procedure, there are some risks and side effects you should know about. Commonly encountered side effects are increased pain from the injection (usually temporary), infection, bleeding, nerve damage, or no relief from your usual pain. Side effects of the injected steroid may include weight gain, increase in blood sugar (mainly in diabetics), water retention, suppression of your own natural production of steroids, or temporary suppression of your immune system.

Who should not have this injection?

The following patients should not have this injection: if you are allergic to any of the medications to be injected, if you are on a blood-thinning medication (e.g. coumadin, injectable heparin), or if you have an active infection going on.