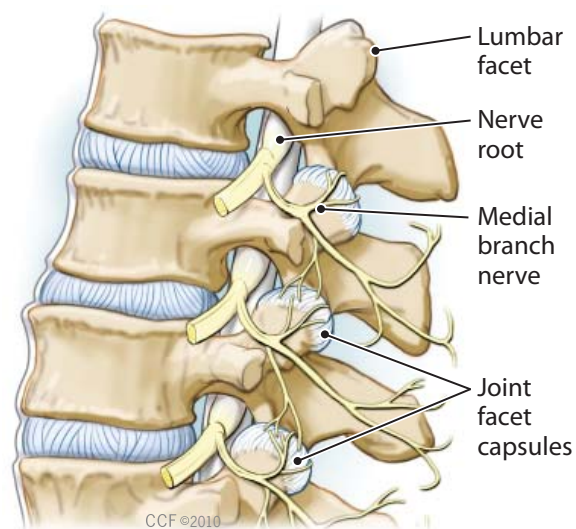


Lumbar Radiofrequency Ablation to Treat Lumbar Facet Joint Pain

What are lumbar facet joints?

Facet joints (also known as the Zygapophysial joints or Z-joints) are paired structures at the back of each vertebra (spinal column bones). The facet joints, like other joints in the body, form a working motion unit that allows movement between two vertebrae.

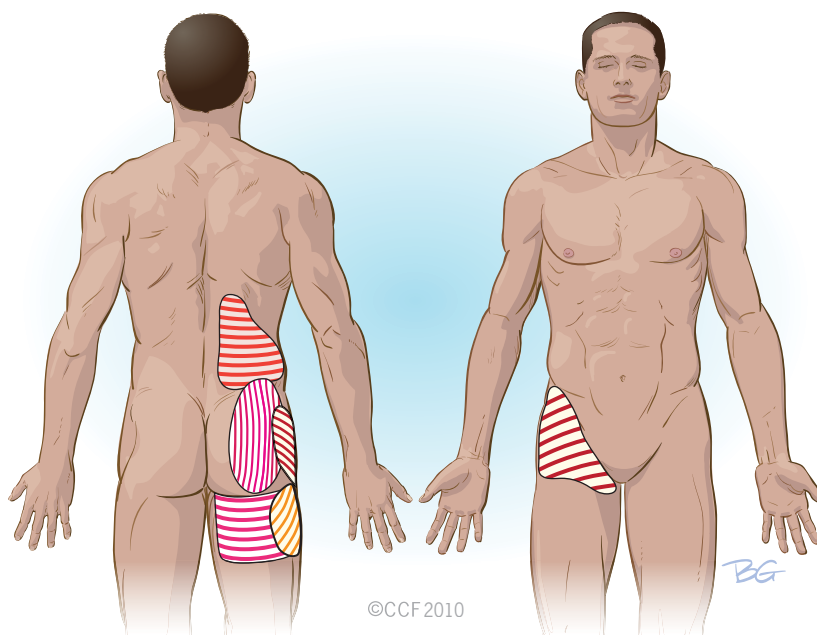
The term “lumbar” refers to the lower part of the back. Similar to the shoulder or knee joints, lumbar facet joints are surrounded by a capsule that bathes the moving parts in lubricating fluid.



Facet joints and medial branch nerves

Why do lumbar facet joints become painful?

When a facet joint is injured, pain signals from the facet joints travel along sensory nerves called the medial branches to the spinal cord and then to the brain. The injury may involve the cartilage (slippery covering of the ends of bones), the capsule, or the ligaments that surround the joint and connect it to the other parts of the spine. Additionally, the joint injury/pain may also cause muscle spasms through a natural “reflex-action.” The location of the pain depends upon which facet joint has been injured. As seen in the diagram (right), the pain location may vary from your lower back to your buttocks.



Lumbar facet joint pain sites

How is lumbar facet joint pain diagnosed?

Lumbar facet joint pain can be hard to see on X-rays or MRI (magnetic resonance imaging tests). Before a lumbar radiofrequency ablation (lumbar RFA) is considered, your doctor will perform a clinical exam and may recommend a diagnostic procedure to temporarily block the medial branch nerve to identify the source of pain.

What is a lumbar radiofrequency ablation?

A lumbar RFA is a procedure that uses radio waves to stop the lumbar medial branch nerve from transmitting pain signals from the injured facet joint to the brain. The procedure calls for a needle to be inserted through the skin and guided with X-ray to the correct site overlying the medial branch nerve.

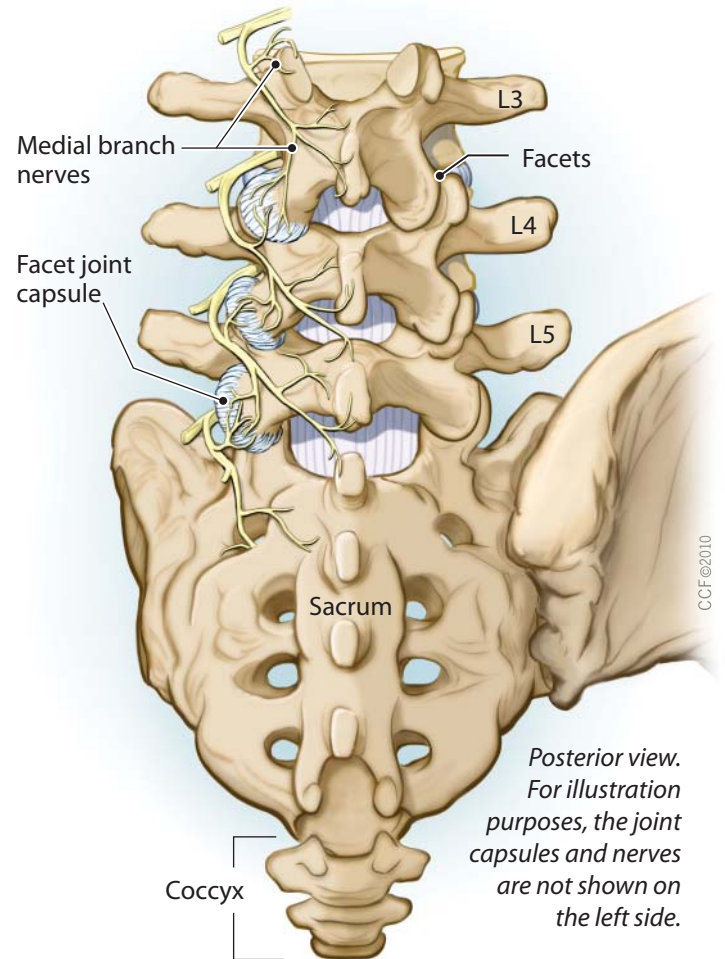
Before the procedure:

You will meet with a doctor who will explain the risks and benefits of the procedure and answer any questions you may have. The potential risks include, but are not limited to:

- Infection
- Bleeding
- Nerve Injury
- Temporary pain increase

Two weeks before the procedure:

- Let us know if you have bleeding disorders, or if you are using blood thinners like aspirin, Coumadin® (warfarin), Plavix® (clopidogrel), Ticlid® (ticlopidine), heparin, Lovenox® (enoxaparin), Fragmin® (dalteparin), Aggrenox® (dipyridamole), or NSAIDS (such as ibuprofen, naproxen, nabumetone, diclofenac, etodolac, indomethacin, ketorolac, meloxicam, piroxicam, ketoprofen, oxaprozin), or especially any herbal blood-thinning medications. The above listed medications may increase the risk of bleeding complications.
- If you are taking a blood thinner, please call your primary care physician or cardiologist and ask if it is safe to stop the medication. They will instruct you on how to stop it when it is time for your injection. This will decrease the likelihood of bleeding complications.
- Please honestly review all your medications with us prior to your lumbar RFA procedure. Please inform our staff about any medication changes.
- Please let us know if you have had fevers, antibiotic treatment, any illnesses, or hospitalization within the last 4 weeks. You must be healthy on the day of the procedure.



Facet joints and medial branch nerves (posterior view)

The day of the procedure:

- Do not eat or drink for six hours before your appointment time.
- If you have diabetes and take insulin, you must adjust your insulin dosage the day of the procedure. Your primary care doctor should help you make the correct adjustment for fasting. Bring your diabetes medication with you so you can take it after the procedure.
- Continue to take all medications, ***ESPECIALLY BLOOD PRESSURE MEDICATIONS***, with a small sip of water. Bring all of your medications with you so you can take them as needed before the procedure. Please note: your blood sugar and blood pressure will need to be within a safe range on the day of the procedure.
- You will need to have someone drive you home after the procedure. Please bring a responsible adult driver with you to your appointment.

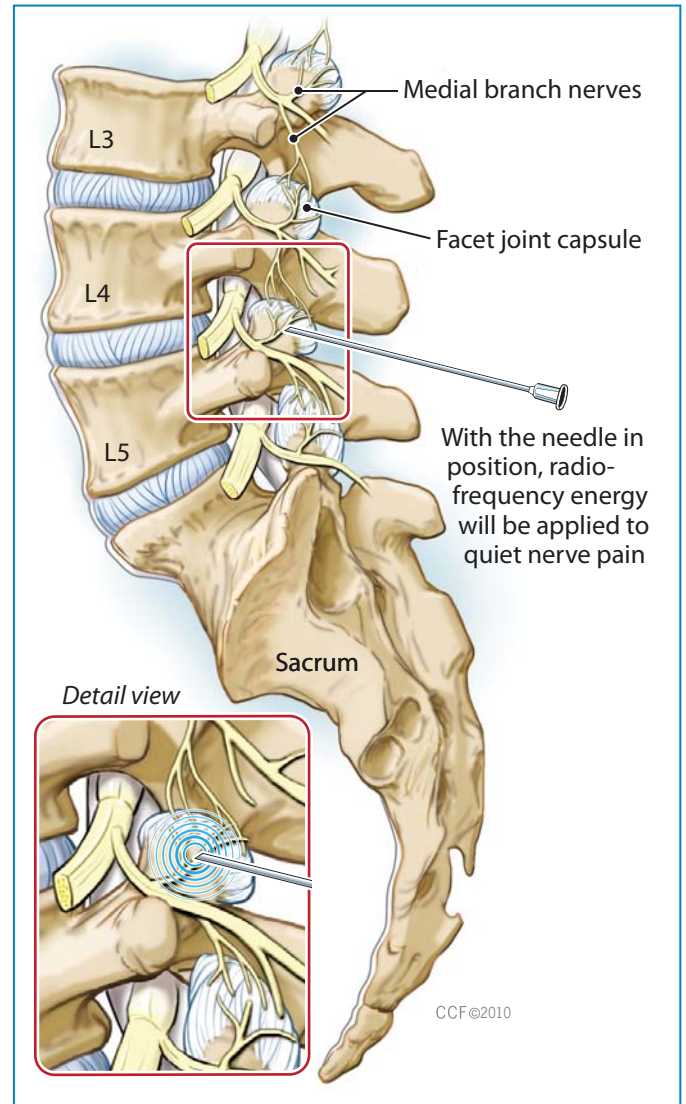
What will happen during the procedure?

- The procedure will take 20 to 45 minutes, with you lying on your stomach.
- You will be given local anesthesia. If needed, sedative medication may be given to reduce discomfort. You will be awake during much of the procedure.
- The needle will be directed to its proper location using X-ray guidance.
- During the procedure, the doctor will ask you if you feel a tingling sensation or if you feel your muscle twitching. This will help ensure the electrode is in the proper place.
- Once the needle and electrode are in the correct location, the nerve is heated with radio waves until that nerve is unable to pass pain signals to the brain.

What happens after the procedure is done?

After the procedure:

- A bandage may be placed over the injection site.
- You will rest, lying down, in a recovery room for around 30 minutes.
- A nurse will check your blood pressure and pulse. The nurse will also discuss your discharge instructions with you.
- A responsible adult must drive you home. You must not drive yourself.



The lumbar radiofrequency ablation procedure (side view)

Discharge instructions:

- Do not drive or operate machinery for at least 24 hours after the radiofrequency ablation.
- You may resume your normal diet.
- Do not participate in strenuous activity that day.
- You may take a shower. Do not take a bath or sit in a hot tub for 48 hours.
- You may remove any bandages the morning following the procedure.
- If you are taking a blood thinner like aspirin, Plavix, Ticlid, Coumadin, heparin, Lovenox, among others, you may restart it.

Locations and to schedule a radiofrequency ablation procedure:

- *Lutheran Hospital: 216.363.2311, Option 1*
- *Main Campus: 216.445.9744*
- *Medina Hospital: 330.721.5879*
- *RE Jacobs Health Center Spine Institute: 440.695.4000*
- *Twinsburg Family Health and Surgical Center: 330.888.4000*

When should I call for help?

If you develop a fever, chills, increasing pain, or if you have new symptoms, please call your physician's office directly. After hours, please call the Cleveland Clinic operator (216.444.2200) and request to speak to the Medical Spine Fellow on call.

This information is not intended to replace the medical advice of your doctor or health care provider. Please consult your health care provider for advice about a specific medical condition.



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