Understanding Lumbar and Cervical Medial Branch Blocks (MBB) and Radiofrequency Ablation (RFA)

Treating Pain from the Facet Joints

Your low back pain may be coming from the facet joints, which are small joints in the back of your spine. These joints help your spine move and provide stability. When they become arthritic or inflamed, they can cause pain with standing, walking, twisting, or leaning backward.

The nerves that carry pain signals from these joints are called the medial branch nerves.

Because these nerves do not control muscle strength or sensation in your legs, they can safely be tested and treated to help reduce pain.

STEP 1 First Diagnostic Medial Branch Block (Lidocaine)

The first step is a diagnostic injection using a short-acting numbing medicine called lidocaine.

Why do we do this?

The injection temporarily numbs the medial branch nerves. If your pain improves while the medicine is working, it tells us the facet joints are likely the source of your pain.

This is a test, not a long-term treatment.

What should I do after the injection?

After leaving the office:

- Perform activities that normally increase your pain.
- Walk, stand, bend, or do your usual daily activities.
- Keep track of your pain level and your ability to move.
- Write down how much relief you experience and how long it lasts.

STEP 2 Second Diagnostic Medial Branch Block (Marcaine)

If the first block is positive, we repeat the procedure using a different numbing medicine called Marcaine (bupivacaine).

Using two different anesthetics helps confirm that the medial branch nerves are truly causing your pain and improves the accuracy of selecting patients who are most likely to benefit from radiofrequency ablation.

Again, this is a diagnostic test, not a permanent treatment.

How Do We Decide if You Are a Candidate for Radiofrequency Ablation?

To move forward with radiofrequency ablation (RFA), both diagnostic medial branch blocks should demonstrate:

- Greater than 80% reduction in your typical pain, OR
- At least a 50% improvement in your ability to move and perform activities that were previously limited by pain.

Examples of improved function include:

- Standing longer
- Walking farther
- Easier bending or twisting
- Getting in and out of a chair or car more comfortably
- Sleeping better because of reduced pain
- Returning to normal daily activities

Your feedback after each injection is one of the most important parts of the evaluation.

STEP 3 Radiofrequency Ablation (RFA)

If your diagnostic injections are successful, radiofrequency ablation may provide longer-lasting pain relief.

During RFA, a specialized needle is placed next to the same medial branch nerves that were tested during the diagnostic injections.

A controlled amount of heat is applied to interrupt the nerves' ability to carry pain signals.

The nerves are not permanently destroyed. Over time they usually grow back, which means pain may eventually return.

What Should I Expect After RFA?

Many patients notice improvement gradually over 2 to 6 weeks.

Pain relief commonly lasts 6 to 24 months, although every patient is different.

If your pain returns after the nerves regenerate and you previously had good relief, the procedure may be repeated if appropriate.

Benefits of RFA

Patients who respond well may experience:

- Significant reduction in back pain
- Improved mobility
- Increased walking and standing tolerance
- Better participation in work, hobbies, and exercise
- Reduced need for pain medication
- Improved quality of life

Are There Risks?

Like any medical procedure, there are risks, although serious complications are uncommon.

Possible side effects include:

- Temporary soreness at the injection site
- Bruising
- Temporary increase in pain
- Numbness or tingling near the treatment area
- Infection (rare)
- Bleeding (rare)
- Allergic reaction (rare)
- Nerve injury (very rare)

Your physician will review your medications and medical history to minimize these risks.

Frequently Asked Questions

Will the injections cure my arthritis?

No. The injections identify whether the facet joints are causing your pain. RFA treats the pain signals but does not reverse arthritis.

Will I be asleep?

Most patients remain awake with local numbing medicine. Light sedation may be offered in selected cases.

Will I need physical therapy?

Many patients achieve better long-term results when pain relief is combined with exercise, stretching, physical therapy, weight management, and healthy spine habits.

Can the procedure be repeated?

Yes. If RFA provides meaningful pain relief and the pain returns after the nerves regenerate, the procedure can often be repeated.

Remember

The diagnostic medial branch blocks are the most important step in determining whether radiofrequency ablation is likely to help you.

Our goal is to select patients who have the greatest chance of achieving long-lasting pain relief while avoiding unnecessary procedures.

What Are the Chances That RFA Will Help?

Radiofrequency ablation is one of the most effective treatments for pain coming from the lumbar facet joints, but no procedure works for everyone.

By performing two successful diagnostic medial branch blocks before RFA, we are selecting patients who are the most likely to benefit.

Based on published medical studies:

- Approximately 70–85% of carefully selected patients experience meaningful pain relief after lumbar radiofrequency ablation.
- Many patients report 50% or greater pain reduction, while some experience near-complete relief.
- Relief commonly lasts 6–24 months, although this varies from person to person.
- About 15–30% of patients have little or no improvement despite positive diagnostic blocks.

Several factors can affect the outcome, including:

- The exact source of your pain
- The severity of arthritis and other spine conditions
- Nerve healing after the procedure
- Overall health and activity level

Because your body heals over time, the treated nerves usually grow back. If you had good pain relief and your symptoms return, the procedure can often be repeated.

Our goal is to perform RFA only when the diagnostic injections strongly suggest that your pain is coming from the facet joints. This careful approach gives you the best chance of achieving meaningful, long-lasting pain relief while avoiding unnecessary procedures.