

LUMBAR FACET SYNDROME/ARTHROPATHY

WHAT ARE THE FACET JOINTS?

Small joints that run the entire length of the spine the allow the spine to move, similar to other joints in the body, these can degenerate based on poor posture and stress upon the cartilage within the joints. Once the cartilage degenerates, a

"Bone on Bone" type of picture can occur which causes pain with certain spine positions. Facet joints account for up to 45% of low back pain¹

LUMBAR FACET JOINT PAIN PRESENTATION?

Low back pain, buttock or outside hip pain is the most common symptom, usually aggravated by prolonged postures, standing, walking or straightening the spine. Back pain is usually the strongest area with radiating hip, buttock, or groin pain. Sometimes radiating pain may reach the foot, mimicking sciatic pain, called "pseudosciatica". Pain is usually worse in the morning, during periods of inactivity, and after prolonged standing.

WHY DO FACET JOINTS BECOME PAINFUL?

Most common is a long standing pressure upon the joint. This occurs with greater than ideal body weight, impaired posture,

prior lumbar surgery or a history of a disc bulge or injury. When a facet joint is injured, pain signals 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."

HOW TO DIAGNOSE FACET JOINT PAIN

Although imaging (radiographs, MRI, CT, SPECT) for back pain syndrome is very commonly performed, there are no effective correlations between clinical symptoms and degenerative spinal changes. For this reason, for pain suspected to be from the facet joints, a <u>diagnostic medial branch nerve block</u> must be performed.

WHAT IS A MEDIAL BRANCH NERVE BLOCK?

A diagnostic block to temporarily stop incoming pain signals from the facet joint.

Think of this nerve block <u>similar to a lab test, Xray, or biopsy</u>. It is a diagnostic tool & <u>not a treatment</u> procedure and pain should return within 24-48 hours. If the facet joints are not the main issue causing your pain, then you may not have any or have minimal pain relief within the 24-48 hour period.

HOW DO I INTERPRET THE OUTCOME OF THE PROCEDURE?

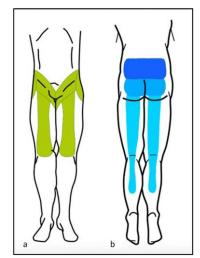
- Pain relief or no pain relief is very important to find the cause of your pain
 - 1) PAIN DOES NOT IMPROVE FOR A FEW HOURS AFTER THE PROCEDURE:
 - a. This means that the pain is probably not coming from the facet joints. This will help your provider workup other areas that can present in a similar manner as facet joint pain.

2) PAIN DOES IMPROVE FOR A FEW HOURS & THEN RETURNS:

a. This would mean that the pain is probably coming from the facet joints and an ablation would be appropriate

WHAT SHOULD I DO AFTER MY PROCEDURE

You will not be able to drive, but we want you to test out the block by doing tasks that typically are painful



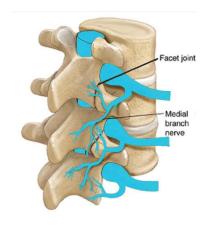
Facet Joint Radiation

Front (Left Side/a):

Possible radiation areas. a anterior aspect of the lower limb (green). b posterior aspect of the lower limb etc.

Back Side (Right/b):

From most frequent (dark blue), to less frequent (light blue) radiating pain areas.



- Avoid heat on the injected areas, taking a tub bath or soaking in water (i.e. pool, jacuzzi, etc.) for 48 hours
- Most important is to see if activities that were painful before the procedure are less painful and if your function is improved as it is a DIAGNOSTIC block. You will call our clinic at (775) 870-1480 the day after for results

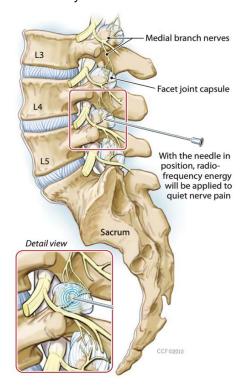
If your diagnostic/test block is successful, then you may be a candidate for a radiofrequency ablation (RFA)

WHAT IS A RADIOFREQUENCY ABLATION (RFA)

A lumbar RFA is a procedure that uses radio waves to stop the lumbar medial branch nerve from transmitting pain signals. 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. The sound waves heat the nerve causing damage but not permanently destroying the nerve. Pain relief ranges between 50% and 95% of baseline pain levels and these effects last anywhere between 6 and 15 months.

WHAT ARE THE RISKS OF RFA

- No relief from any procedure or surgey is always a risk. Studies
 demonstrate a small subset of patients who respond very well to the
 diagnostic medial branch blocks do not respond to the subsequent
 ablation or pain can become worse
- Post procedure pain that may last for a week or two after the procedure
- The risk of complications from RFA is very low. On occasion, permanent nerve damage or pain can occur
- Other uncommon complications, include the standard risks of a needle entering the skin, which include infection and bleeding at the needle insertion site



BEFORE THE PROCEDURE

- Our office staff will call you a few days before the procedue for a pre-procedure screening.
- 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.
- If you are placed on antibiotics for any reason, please alert our office. The procedure will need to be rescheduled to reduce the risk of an infection
- Your doctor may call in a medication to help you relax during the procedure, if this is something you would be interested please alert our office staff 2 days before the procedure so we may send the medication into your pharmacy

THE DAY OF THE PROCEDURE

- You will be required to have a driver as the numbing medication used can spread and cause temporary muscle weakness of the leg for a few hours
- The procedure should take about 30 minutes to perform and will equire you to lay on your stomach
- You will receive post procedure instructions the day of the procedure

WHAT TO EXPECT AFTER THE PROCEDURE

- Is immediate pain relief expected?
 - o **No**, the physiology of heating the nerve does not cause immediate effects
- The low back/hip region pain may be improved for 4-6 hours while the local anesthesia (numbing medication) is working (similar to the medial branch blocks). There typically is an increase in pain after this wears off. Ice packs used for 20-30 minutes every 1-2 hours is very helpful for this post procedure soreness.
- Since it takes up to 14 days for the nerve to be affected by the ablation, pain relief can take up to 14 days
- Many times other areas are also sending pain signals that may not have been severe before the ablation but now that the facet joint pain signals are reduced, you may feel a pain from a different source. This may feel like the ablation was not effective. This is one of the reasons why a 14 day post procedure follow up is needed.