

#### WHAT ARE THE FACET JOINTS?

Small joints that run the entire length of the spine that 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 pain<sup>1</sup>

#### HOW DOES FACET JOINT PAIN PRESENT?

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 less severe. Sometimes radiating pain may reach the foot, mimicking sciatic pain. Pain is usually worse in the morning, during periods of inactivity, and following stress exercise, lumbar spine extension or rotary trunk motions, is provoked by standing or sitting positions.

#### HOW IS FACET JOINT PAIN DIAGNOSED?

Many other conditions can present similar such as a pinched nerve (“sciatica”), discogenic pain, muscle strain, sacroiliac joint pain, fibromyalgia, etc. History, exam, and imaging are helpful but not conclusive. More than one third of all adults over the age of 20 and 100% of adult over the age of 60 have degenerative changes of the facet joints on imaging, even though some of these people have no pain at all<sup>2</sup>. This is why a diagnostic medial branch nerve block is done to stop the pain signals from the joint.

#### WHAT IS A MEDIAL BRANCH BLOCK?

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

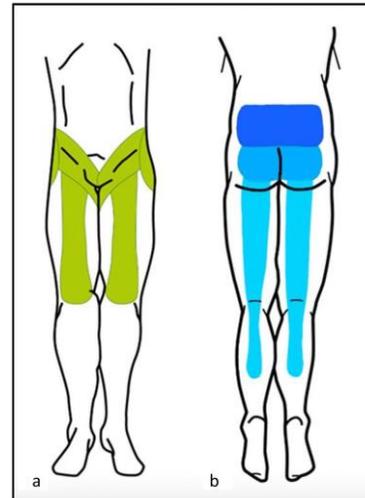
Think of this nerve block similar to a lab test, Xray, or biopsy. It is a diagnostic tool & **not a treatment** procedure and pain should return within 24-48 hours. If the facet joints are not the main issue causing your pain, then you may not have any or have minimal pain relief within the 24-48 hour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

#### HOW DO I INTERPRET THE OUTCOME OF THE PROCEDURE?

- Pain relief OR no pain relief is very helpful in determining your pain generator
  - 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 joints
  - 3) **PAIN IMPROVES FOR A FEW HOURS & RETURNS WITHIN 24 HOURS, BUT IMPROVES AGAIN AFTER SEVERAL DAYS:**
    - a. This means that the medications had an unusual long-lasting effect on the pain

#### WHAT SHOULD I DO AFTER MY PROCEDURE

- 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
- Do not drive for the remainder of the day, on the day the procedure is performed.
- Avoid using heat on the injected areas, taking a tub bath or soaking in water (i.e. pool, jacuzzi, etc.) for the rest of the day



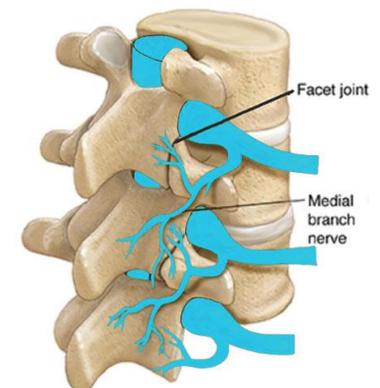
#### Facet Joint Radiation

##### 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. Dark blue: pain limited to lower back. Intermediate blue: radiating pain to the posterior aspect of the buttocks. Light blue: radiating pain to the posterior aspect of the lower limbs, may extend lower than the knee level.



## REFERENCES

1. Perolat, R., Kastler, A., Nicot, B. et al. Facet joint syndrome: from diagnosis to interventional management. *Insights Imaging* 9, 773–789 (2018). <https://doi.org/10.1007/s13244-018-0638-x>
2. Kalichman L, Li L, Kim DH et al (2008) Facet joint osteoarthritis and low back pain in the community-based population. *Spine (Phila Pa 1976)* 33(23):2560–2565