Coastal Pain & Spine Center

Medial Branch Block and Radiofrequency Ablation

What are the Facet joints?

Facet joints are small joints throughout the spine that provide stability and help guide movement. Like other joints in the body, they can become painful as a result of arthritis, injury, or mechanical stress. Pain tends to stay in the neck and back rather than extend all the way down the arms and legs though on occasion there can be minor radiation of pain into the upper aspect of extremities, shoulders, and can even cause headaches.

How can pain coming from Facet joints be treated?

The two methods to treat these symptoms:

- 1) Medial Branch Block (MBB) followed by Radiofrequency Ablation (RFA)
- 2) Intra-Facet Steroid Injection

What is a MBB the procedure?

The *MBB* is a *Diagnostic* or *Test* procedure to determine the source of your pain. It takes about 5-15 minutes for completion. Nerves called "medial branches" supply sensation to the facet joints. These nerves carry pain signals to the brain. To complete the procedure, low dose xray guidance and small needles (typically 3) are carefully advanced to place a small amount of anesthetic (numbing medication) on the nerves supplying the joints. This is called a *Diagnostic MBB* as the goal is to determine if your pain resolves immediately or shortly following the procedure. If so, it suggests the facet joints are the source of the pain. Some insurance companies require the *Diagnostic MBB* to be completed two times. The test block generally offers only temporary relief while the anesthetic/numbing medication is still present; **typically 6-24 hours**. In a few patients, they will have long standing benefit from the test itself. If there is short term benefit from the test blocks, but the pain returns, moving forward with the *RFA* for long lasting relief is the final step.

What is a RFA procedure?

The *RFA* portion is very similar to the MBB though we use a specialized machine and needle to generate heat "burning" the medial branch nerve at the end of the procedure. The initial placement of the needles will feel identical to the MBB noted above. After needles are in proper position, additional safety precautions are taken to ensure it will only target the small medial branch nerves and will not affect the larger nerves providing sensation or motor strength in the extremities. Strong local anesthetic is administered before the nerves are heated/burned though some mild pressure can be common. The entire procedure takes ~20 minutes with the burning itself lasting only 90 seconds. The heating of nerves results in pain relief for approximately **1-2 years** though for some can be slightly shorter and others considerably longer benefit.

What are the risks?

As with any procedure it is not without risks. With placement of a needle there is always concern for infection or bleeding. Notify your doctor if you are taking any blood thinners/aspirin/plavix or have an active infection. Given the proximity to the spine, there is risk of nerve injury or damage. For the RFA, steroids are often used thus patients with diabetes should watch their blood sugar closely. Generally, the biggest risk is some mild post procedure soreness which typically resolves in 24 hours. Risk that the procedure does not offer any improvement is also possible though stresses the importance of the *diagnostic MBB*.

What if the pain returns?

It is normal for this to occur following the diagnostic/test block. If pain returns following the RFA we can often repeat it as needed pending the duration of pain relief.