



## **AdvaCare Clinics: Joint Pain Relief**

Facet joints (also known as z-joints or zygapophysial joints), are located on the back (posterior) of the spine on each side of the vertebrae where it overlaps the neighboring vertebrae.

The facet joints provide stability and give the spine the ability to bend and twist (facets provide about 20 percent of the twisting stability in the low back). They are made up of the two surfaces of the adjacent vertebrae, which are separated by a thin layer of cartilage. The joint is surrounded by a sac-like capsule and is filled with synovial fluid (a lubricating liquid that reduces the friction between the two bone surfaces when the spine moves and also nourishes the cartilage.)

Facet joints are in almost constant motion with the spine and quite commonly simply wear out or become degenerated in many patients. When facet joints become worn or torn the cartilage may become thin or disappear and there may be a reaction of the bone of the joint underneath producing overgrowth of bone spurs and an enlargement of the joints. The joint is then said to have arthritic (literally, joint inflammation-degeneration) can progress to osteoarthritis that can cause severe back pain on motion. This condition may also be referred to as “facet joint disease” or “facet joint syndrome”.

Also, each joint has a rich supply of tiny nerve fibers that provide a painful stimulus when the joint is injured or irritated. Inflamed facets can cause a powerful muscle spasm.

### **Facet Joint Injection Treatment**

There are basically two reasons for having a facet joint injection:

- 1) Diagnosis (to determine the source of pain).
- 2) Therapy (to treat an abnormality that has been detected).

If you suffer from back pain for more than one week and conservative treatments have not helped, or if your pain has increased, your physician may order diagnostic tests such as magnetic resonance imaging (MRI), computerized tomography (CT), or a Diagnostic Ultrasound scans to look at the structures of the spine. A problem (such as inflammation, irritation, swelling or arthritis) in the facet joint may cause low back pain. Diagnostic tests can show an abnormality in a facet joint, which may suggest that the facet joint is the source of the pain. However, sometimes normal study results can be present while the facet joint is still the source of pain, and abnormal results do not always implicate the facet joint.

To determine if a facet joint is truly the source of back pain, an injection (sometimes called a “block”) may be prescribed. If an injection of a small amount of anesthetic or

numbing medication into the facet joint reduces or removes the pain, it indicates that the facet joint may be the source of the pain. This is diagnostic use of the facet joint injection.

Facet joint injections are performed while you are awake, under a local anesthetic, and able to communicate. Sometimes, your health care provider may also administer drugs to make you more comfortable during the procedure. The injection is usually performed while you are lying on your stomach on an X-ray table. EKG, blood pressure cuffs and blood-oxygen monitoring devices may be hooked up prior to the injection process.

Your physician or an assistant will clean and sterilize the area of the back directly over the affected joint. During the procedure, you probably will undergo a fluoroscopic Xray that allows your physician to place the needle in the correct facet joint. After careful placement, your physician will then use a local anesthetic to numb the skin over the injection site. Before your health care provider injects the actual medication into the joint capsule, he or she will inject the joint with a contrast (dye) that will show up on the X-ray to ensure he or she has the proper site for injecting the medications.

Once the proper site has been determined, your physician will inject the anesthetic (often lidocaine or bupivacaine) and the anti-inflammatory (usually a corticosteroid.) You may be asked whether you are experiencing pain relief or not, to make sure the injection is in the right place and determine if additional injections are needed. This process may then be repeated depending on the number of affected facet joints.

Although the actual injection takes only a few minutes, the overall procedure usually takes approximately 30 to 60 minutes.

Repeat injections may be considered depending on pain relief provided. Otherwise, facet injections may be precursors to other therapeutic measures. These can be discussed with your healthcare provider.

For anyone who is interested in finding out more, contact AdvaCare Clinic today at 952-835-6653.