



Transforaminal Epidural Steroid Injection

Another common injection, a Transforaminal Epidural Steroid Injection (TFESI), is primarily used to diagnose the specific source of nerve root pain and, secondarily, for therapeutic relief of low back pain and/or leg pain.

When a nerve root becomes compressed and inflamed, it can produce back and/or leg pain. Occasionally, an imaging study (e.g. MRI) may not clearly show which nerve is causing the pain and a TFESI injection is performed to assist in isolating the source of pain. In addition to its diagnostic function, this type of injection can also be used as a treatment for a far lateral disc herniation (a disc that ruptures outside the spinal canal).

In a TFESI, the nerve is approached at the level where it exits the foramen (the hole between the vertebral bodies). The injection is done both with a steroid (an anti-inflammatory medication). Fluoroscopy (live x-ray) is used to ensure the medication is delivered to the correct location. If the patient's pain is recreated during the injection, it can be inferred that the pain generator is the specific nerve root that has just been injected. Following the injection, the steroid also helps reduce inflammation around the nerve root.

Success rates vary depending on the primary diagnosis and whether or not the injections are being used primarily for diagnosis. While there is no definitive research to dictate the frequency of TFESI's, it is generally considered reasonable to limit TFESI's to three times per 6 months.

Technically, TFESI injections are more difficult to perform than epidurals and should be performed by experienced physicians. Since the injection is outside the spine, there is no risk of a wet tap (cerebrospinal fluid leak).