

SELECTIVE TRANSFORAMINAL EPIDURAL INJECTIONS

Local anaesthetic and corticosteroid agents have been injected into the epidural space for the treatment of radicular leg pain (sciatica) for more than 50 years with the first published papers on steroid injection in 1952. James Cyriax popularised the use of large volume local anaesthetic caudal epidural injections for sciatica in the 1950's. Caudal epidurals are where the injection is given into the lower sacrum (tail bone) and the fluid travels up the spinal canal. A new more precise technique of transforaminal epidural injection has been developed with the assistance of C-arm fluoroscopy (a high tech X-ray machine that looks at the spine from all directions). In this instance the needle is aimed under X-ray guidance directly between the nerve root and the corner of the disc. The main advantage of this technique is providing a greater concentration of therapeutic agent at the site of inflammation. Lutz recently published outcome data showing a 75% long term success rate for the treatment of disc prolapse, with an average of 1.8 injections.

Indications for procedure

- Diagnosis for radicular pain.
- Treatment of radicular pain (sciatica) or axial pain (back pain) that will benefit from injection of anti-inflammatory steroid into the epidural space at the target level.

Side effects

The most common problem is inadvertent needling of the nerve root causing temporary aggravation of radicular pain (one in ten procedures). However lesser common side effects are listed below.

1. Risks associated with needle placement are minimised using the X-ray machine and contrast agent, but bleeding and nerve injury are potentially possible.
2. Allergic reaction to contrast agent
3. Transient numbness and weakness in one leg on the side of the injection lasts up to one hour and rarely there can be transient loss of bladder or bowel function.
4. Arachnoiditis (Inflammation of the dura) has been reported in the 1980s with inadvertent intrathecal injection following other types of epidurals and is a potential rare complication,
5. Rarely, but possible, is potential spinal infection or hemorrhage with substantial, neurological complications.

Epidural steroids have been shown to be safe when confined to the epidural space.

Recovery and Discharge

There will be partial numbness of the affected nerve root causing transient weakness of the leg for up to one hour. Most patients can walk afterwards, but are advised to rest for one day. Improvement can be expected within 48 hours and continuing over a period of 4 to 6 weeks.

Fees

The Australian Medical Association has a recommended fee of \$396 (item CV120). Our fee is \$250, rebate from medicare is \$142.

Reference

Lutz,G.E., Vad,V.B., and Wisneski,R.J., Fluoroscopic transforaminal lumbar epidural steroids: an outcome study, Arch.Phys.Med.Rehabil., 79 (1998) 1362-1366.