

## **Epidural Steroid Injection 硬膜外類固醇注射**

### **Introduction**

The spinal cord runs within the bony structure of the vertebral column and is covered by a membranous sac called the dural sac. This sac contains spinal fluid that bathes and nourishes the spinal cord. The epidural space is the space between the outer surface of the dural sac and the bones of the vertebral column. Epidural steroid injection refers to the injection of corticosteroids into the epidural space. The procedure is indicated for pain due to e.g. sciatica and other irritable radiculopathy.

### **How does Epidural Steroid Injection work?**

1. The injection of steroids into the epidural space help reduces the inflammation and swelling and relief the pain.
2. The volume of injectate may physically relief nerve root irritation.

Most patients will receive good pain relief for a few weeks up to 3 months after the injection. You are unlikely to benefit from repeated injection if the first injection does not offer relief.

### **The Procedure**

1. You may be asked to fast for a period of time before the procedure.
2. An intravenous cannula is first inserted into your vein.
3. You will be asked to bend forward in the sitting or lie on your side on the operating table.
4. The procedure site is first disinfected, then local anaesthetic will be injected into the skin.
5. The needle is then inserted on your back to the desired position.
6. You are requested to lie as still as possible during insertion of needle to prevent any complication.
7. Contrast would be administered to make sure that it's the correct target.
8. The steroid-containing medication is then injected. Sometimes, the steroid may be administered with a local anaesthetic agent.

### **Side effects and Complications**

There are potential side effects and complications, which in most cases are uncommon and may not be serious.

1. A temporary increase in pain during and after the injection in the initial 2-3 days (~5%).

2. Uncommonly you may get a headache (<1%). In most cases subsides after a few days.
3. If the dura is punctured accidentally, you may get post dural puncture headache. This is a positional-related headache which might affect your daily livings. In most cases it would be subside after 1-2 weeks. In rare occasion, special treatment may be needed.
4. If the local anaesthetic and steroid mixture is administered into wrong area, you may get toxicity and it could be life threatening.
5. You may feel dizzy as your blood pressure may drop temporarily during or after the injection. This may be corrected by staying calm and by infusion of fluid through the intravenous cannula.
6. If you are allergic to one of the injected solution, you may experience a hot flush, dizziness or develop a rash. However this is rare and should get better within a few hours.
7. Bacterial infection due to the procedure is rare.
8. Rarely leg weakness and paraplegia may occur. There is a rare risk of permanent nerve damage.

### Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor.