

The Integrative Pain Center of Arizona

3100 N. Campbell Ave., #104 | Tucson, AZ 85719 | (520) 797-7246

Questions and Answers Epidurolysis with hypertonic saline

1. What is an Epidurolysis procedure?

Epidurolysis procedure is used to loosen and dissolve some of the scar tissue from around entrapped nerves in the epidural space of spine, so that medications such as cortisone can reach the affected areas, and so that scar tissue is less painful.

2. What causes scarring (adhesions)?

Scarring is most commonly caused from bleeding into the Epidural space following back surgery and the subsequent healing process. It is a natural occurrence following surgical intervention. Sometimes scarring can also occur when a disk ruptures and its contents leak out.

3. What is the purpose of the procedure?

To allow medications to reach affected nerves so that pain and other symptoms may be diminished, and to make scar tissue less painful.

4. How long does the procedure take?

The procedure requires a series of three injections. First, a catheter (a small tubing) inserted in the Epidural space up to the area of scarring. This is done in the operating room under sterile conditions using fluoroscopy (x-ray vision). This catheter is secured to the skin with dressings and tapes. The first injection of medications is made via this catheter. The patients are then kept in the hospital overnight. The second injection is done the following day; the catheter is injected and then removed. Will be sent home on the second day. The actual injections only take a few minutes.

5. What is actually injected?

The injection consists of a mixture of local anesthetic (like lidocaine or bupivacaine) and the steroid medication (triamcinolone – Aristocort® or methylprednisolone – Depo-medrol®, as well as x-ray contrast dye to visualize scarred space and hyaluronidase – and concentrated sterile salt solution to soften scar tissue and make it hurt less.

6. Will the injection hurt?

The procedure involves inserting a needle through skin and deeper tissues (like a “tetanus shot”). So, there is some discomfort involved. However, we numb the skin and deeper tissues with a local anesthetic using a very thin needle prior to inserting the epidural needle. The patients also receive intravenous sedation and analgesia, which makes the procedure easy to tolerate.

7. Will I be “put out” for this procedure?

No. This procedure is done under local anesthesia. The patients also receive intravenous sedation and analgesia, which makes the procedure easy to tolerate. The amount of sedation given generally depends upon the patient tolerance. We like to communicate with the patients during the procedure to help assess the proper location of the catheter tip.

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8. How is the procedure performed?

It is done with the patient lying on their stomach. The patients are monitored with EKG, blood pressure cuff and blood oxygen-monitoring device. The skin in the back is cleaned with antiseptic solution and then the procedure is carried out. After the procedure, you are placed on your back or on your side. X-rays (fluoroscopy) is used to assist the placement of the catheter and perform the epidurogram.

9. What should I expect after the injection?

Immediately after the injection, you may feel your legs slightly heavy and may be numb. Also, you may notice that your pain may be gone or quite less. This is due to the local anesthetic injected. This will last only for a few hours.

10. When can I return to work?

Unless there are complications, you should be able to return to your work the day after the catheter is removed. The most common thing you may feel is a sore back.

11. How long the effects of the medication last?

The immediate effect is usually from the local anesthetic injected. This wears off in a few hours. The cortisone starts working in about 5 to 7 days and its effect can last for several days to a few months. The pain relieving effect of the concentrated saline can last up to one year.

12. How many times

do I need to have this procedure performed?

If the first procedure does not relieve your symptoms in about a week to two weeks, it will not be repeated. The procedure can be repeated at most every 6 months

13. Will the Epidurolysis procedure help me?

It is very difficult to predict if the procedure will indeed help you or not. Generally speaking, the patients who have recent scarring (e.g. following back surgery) respond better.

14. What are the risks and side effects?

Generally speaking, this procedure is safe. However, with any procedure there are risks, side effects, and possibility of complications. The most common side effect is pain – which is temporary. The other risks involve spinal puncture with headaches, infection, bleeding inside the Epidural space with nerve damage, worsening of symptoms etc. The other risks are related to the side effects of cortisone: These include weight gain, increase in blood sugar (mainly in diabetics), water retention, suppression of body's own natural production of cortisone etc. Some of the patients may develop allergic reaction to hyaluronidase if this is used. If it leaks into the spinal fluid from the epidural space, the concentrated saline will cause serious nerve damage that can lead to paralysis, loss of sexual function, and loss of bladder and bowel control. The doctor does a test injection of local anesthetic before the saline is injected to make sure that there is no leak into the spinal fluid. If there is, you would have 1-2 hours of very strong weakness and numbness in the legs from the local anesthetic and the doctor would know not to inject the saline. Fortunately, the serious side effects and complications are uncommon.

15. Who should not have this procedure?

If you are allergic to any of the medications to be injected, if you are on a blood thinning medication (e.g. Coumadin, Warfarin), or if you have an active infection going on, you should not have the injection.

16. What should I expect after the injection?

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