

Therapeutic Spinal Blocks and Discography

Dear Patient:

You came to our outpatient clinic with complaints of neck, back or lower back pain and, perhaps, with shooting pain radiating into one of your limbs. The cause of these complaints may be pathological changes in the structural elements of the spine. After evaluating your symptoms, your physical examination results and diagnostic radiological imaging (i.e., x-ray, CT, MRI) your examining physician was able to determine the source of your pain.

The pain, in your case, originates in one of the following structures:

- I. At times, the load borne by the facet joints connecting the vertebrae on the back, for some reason, increase. When this occurs, the natural process of wear and tear (arthrosis) accelerates causing a painful joint, as a result.
- II. Between every two adjacent vertebrae, a pair of nerves exit on both sides of the spinal canal. The ones in the neck segment lead to the upper limbs and those in the lumbar segment lead to the lower limbs. Any irritation or „pinching” of these nerves can lead to inflammation and pain irradiating into the limb involved.
- III. Degeneration of the last two intervertebral discs, the discs that bear the most weight, most often appears first with the consequent narrowing of the spinal canal in this segment possibly leading to the irritation of even more nerves originating in this segment. Similar complaints may be caused by scar tissue in the spinal canal following an earlier spinal surgical procedure in this segment.

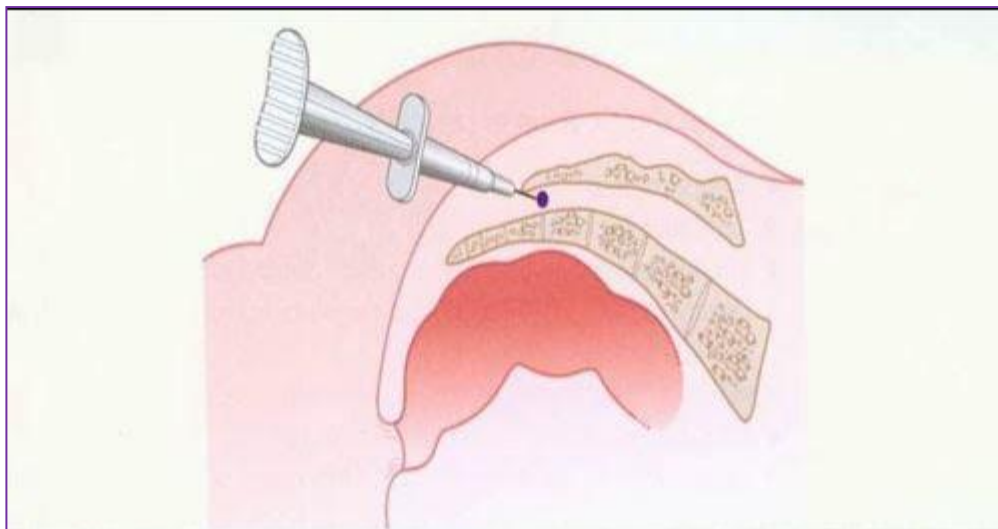
These complaints are most often remediable with conservative treatment, that is, medication, exercise and physiotherapy. There are times, though, when this therapy does not bring about the expected results, or, a precisely determined, one-time „invasive” treatment is deemed more expedient for treating the source of the pain. It is called invasive due to the fact that at least one injection will be required that may possibly be painful.

1. In the case of facet joints, the procedure used is the **targeted facet joint block** performed under sterile conditions with fluoroscopic or CT guidance. This is necessary in order to confirm that the point of the needle inserted is in the proper place within the joint and that the small amount of anesthetics and anti-inflammatories (steroids) will only affect this joint. One to two hours of rest is required following this procedure.
2. The procedure involving the nerves exiting two between adjacent vertebrae, is the **targeted nerve root block** performed under sterile conditions with fluoroscopic or CT guidance. This is necessary in order to confirm that the point of the needle inserted is close to the nerve involved and that the small amount of anesthetics and anti-inflammatories (steroids) will only affect this nerve. Following the injection, the limb involved may feel warm, numb or even weak, the natural effect of the local anesthetic. This may last, at most, one day but generally, only a few hours. One to two hours of rest is required following this procedure.



1.a) Our CT equipment 1.b) Positioning the Patient 1.c) The procedure

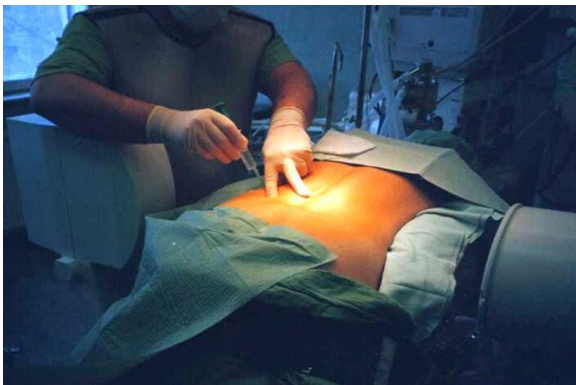
3. **Sacral epidural injection (SEA)** is the procedure performed when, due to narrowing of the lowest lumbar spine segments due to scar tissue following spine surgery, one or more of the nerves originating there is inflamed. The procedure is performed under sterile conditions with the patients lying on their side with their knees drawn in. The active agent is injected with a needle just for this purpose, through the opening on the sacrum, the lower end of the spinal canal, from where the medication will spread to the lower narrowed segments of the spine to exert its anti-inflammatory effect there. Besides, more liquid was injected here (local anesthesia) than in the procedures above mechanically loosening the environment of the nerves. Following the injection, warmth, numbness and even weakness may be felt in both limbs. This is the effect of the local anesthetic and is a natural occurrence, lasting maximum one day but, generally, only a few hours. One to two hours of rest is required following this procedure. No x-ray or CT guidance required.



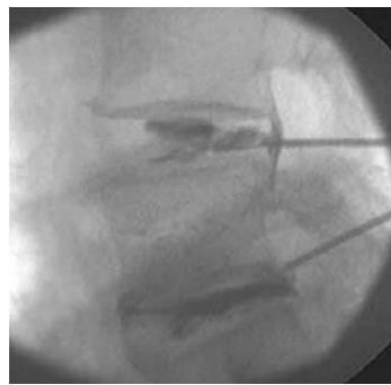
2.) Location of the sacral epidural injection

4. **Discography** is used to determine whether a disc is the source of your pain. The procedure provides information about the disc's structure and any possible damage with your feelings at the increasing (artificially and selectively provoked) internal pressure placed on the intervertebral disc conveyed by you to your physician, noted. In order to minimize your

discomfort and maximize your safety, the procedure is performed under sedation, under sterile conditions in the operating room. Prior to the procedure, you will be injected with a mild sedative and once you are transferred to the operating room and lying on your stomach on the operating table, disinfection, isolation and local anesthesia will follow. With a special needle used for this purpose, contrast material will be injected with slight pressure into the disc involved under fluoroscopic guidance and its dispersion followed on the fluoroscope, as well. At the end of the procedure, your physician may inject an anti-inflammatory (steroid) into the disc to reduce any pain stemming from there. Due to the anesthesia, you will be under observation in your hospital room for a few hours. The results will be evaluated during this time including a description of the disc structure and your pain. A positive result signifies that the disc plays a part in your pain.



3. a) The procedure



3. b.) discography fluoroscopic image

These procedures cannot be performed if you are sensitive to any one of the medications used or if you are taking medication that prevents the blood's natural coagulation, that is, „blood thinners” such as Syncumar, Aspirin Protect, Plavix, etc. Furthermore, since the medications can affect blood sugar levels and blood pressure, increased care is required in cases of diabetes and high blood pressure. Definitely let your physician know if you have any drug allergies, are taking medication that affects blood coagulation, or are under treatment for diabetes or hypertension.

THINGS YOUR DOCTOR SHOULD DEFINITELY KNOW

1. **Do you have any allergies?** (i.e., hay fever, asthma)
Yes
No

2. **Are you sensitive to any medication, food, adhesive bandage, local anesthetics (i.e., Lidocaine), iodine, contrast material?**
Yes
No

3. **Following a previous examination with contrast material, did you have eczema, blood pressure problems, itching?**
Yes
No

4. **Have you ever experienced paralytic symptoms?**
Yes
No

5. **Are you suffering from any of the following diseases?**
 - Haemophilia, Anemia
Yes
No
 - Heart disease
Yes
No
 - Contagious disease /hepatitis, AIDS/
Yes
No
 - High blood pressure
Yes
No
 - Kidney disease
Yes
No
 - Hyperthyroidism
Yes
No
 - Diabetes
Yes
No
 - epilepsy
Yes
No

**6. Are you taking any medication regularly?
(i.e., Syncumar, Aspirin, heart medication)**

Yes
No

**7. Have you had a similar radiological examination in the past
(x-ray, CT, myelography)?**

Yes
No

If yes, on which part of the body?

8. Women of reproductive age:

Is there a chance that you might be pregnant?

Yes
No

**Targeted Nerve Root Block, Targeted Facet Joint Block,
Sacral Epidural Injection (SEA), Discography**

- I was informed regarding the planned intervention by my treating physician verbally and also in written form which I have studied in detail.
- I was informed regarding my illness and the probable causes of my complaints and the consequences thereof.
- I was informed regarding the advantages and possible disadvantages of the treatment.
- I was informed in detail of the possible complications associated with the intervention, their nature, treatment and possible temporary or permanent worsening of my condition.
- I informed my treating physician in so far as I have drug allergies, take anticoagulants (Syncumar, Aspirin Protect, Plavix, etc.) or am being treated for diabetes or high blood pressure.
- I was given exhaustive answers to my questions and have no further questions.
- Having carefully considered the above, I request that, the physician chosen by the Head of the Department perform the intervention to which I have given my consent.
- Having read and being in complete agreement with the foregoing, I, being of sound mind do, hereby, affix my signature to this Consent of my own free will and volition in front of two witnesses here present.

Budapest,

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*Physician who performs the
intervention*

.....
Patient or Legal Guardian

Witness (Name, Address):
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Witness (Name, Address):
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