

## Spinal Catheter Technique Minimal Invasive Epidural Catheter Technique - the Racz Method

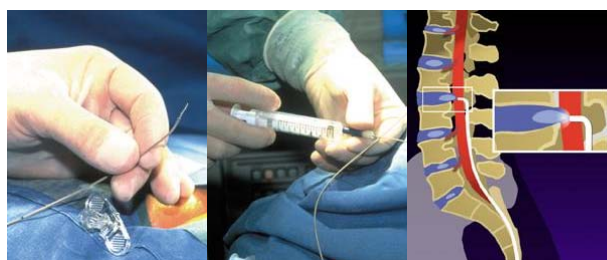
The spinal catheter can be guided exactly into place through the use of image intensifying technology and epidurography (contrast medium x-ray of the epidural space of the spine).

The procedure sets itself apart from other catheter pain management procedures through its unique technology - a flexible catheter specially outfitted with a small probe. This technology makes precise treatment of affected nerve roots possible.

A special cannula is inserted into the epidural space of the spine under local anesthesia: in the coccyx (tailbone) for thoracic and lumbar procedures, and in the upper part of the thoracic spine for cervical (neck) procedures. The specially developed probe is brought exactly into place near the spine through use of image intensifying technology and contrast medium.

The procedure works by reducing swelling and fluid build-up in affected tissues, thereby relieving the irritated nerve root. This is often combined with mechanical freeing of the nerve root from structures that may be adhering to it. By precise injection of various medications (pain and anti-inflammation medications, saline solution) an osmotic effect can be achieved which reduces tissues swelling and with it nerve root irritation. Inflammation disappears. Pain is treated at the source. An additional special enzyme solution is injected to loosen and dissolve scarring and adhesions near the spinal cord.

The entire procedure takes only 30-40 minutes. In as little as an hour after the procedure the patient can stand up and move around. An in-patient stay usually lasts three to four days. During this time the patient receives four further injections of pain medication, saline solution and enzymes through the catheter.



### Indications

- severe acute pain of protruding or herniated disks
- severe chronic pain and irritation of nerve roots
- post-nucleotomy syndrome (pain following herniated disk surgery)
- post-operative epidural scarring and fibrosis
- nerve root irritation/nerve root irritation syndrome through mechanical stresses
- hypertrophied ligamentum flavum or hypertrophied facet joint arthrosis

### Value

The epidural catheter technique makes major surgical procedures unnecessary for a majority of patients with protruding or herniated disks. Patients with chronic back pain following back surgery or those with scarring following surgery for facet joint arthrosis can expect dramatic improvement, even complete recovery of function. With the two-catheter technique a second catheter can be separately inserted in order to overcome scar tissue or anatomic anomalies, allowing an injection to reach the exact site of irritation.

### Advantage

The procedure is performed under local anesthesia. The catheter employs a stainless steel spring tip for gentle, injury-free placement. Compared with normal surgical procedures the catheter technique reduces disk swelling without causing injury.

The in-patient stay lasts three to four days. Light physical activity such as office work can be resumed after discharge.

### **Follow-Up**

A coordinated program of physical therapy should already begin two weeks after treatment. Isometric strength training along with posture and movement training should be stressed. After a further four weeks it is possible to gradually resume normal sport and fitness activity.

### **Work**

Light physical work such as office work can be resumed after one to two weeks. Heavy physical work should be avoided during the first four weeks and can gradually be resumed thereafter.

### **Sport**

Swimming and bike riding (both emphasizing upright posture) are allowed after three weeks. Jogging on soft surfaces is possible after four weeks. All other sports can be gradually resumed after the fifth week depending on their degree of intensity.

### **Results**

A success rate of over 85% is reported in the international literature.