Surgical Treatment: Microdisectomy

When symptoms are serious, surgery may be required. Microdisectomy is a minimal access surgical technique used to treat sciatica. Using a 2cm skin incision and the specially designed instrument, the prolapsed intervertebral disc materials are removed. Patients can often be discharged within a few days.



The healed wound

Possible Complications of Microdisectomy

Risk of complications of microdisectomy is low. Common ones are:

- · General complications in relation to the patient's general health status such as stroke, heart attack, etc.
- · Damage to the spinal nerve with possible permanent loss of sensation and leg movement, and poor urine and bowel control
- Wound infection
- Recurrence of the prolapsed intervertebral disc

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What Is Sciatica?

The sciatic nerve is composed of the nerve roots from the lumbar spine. It starts from the lumbar spine, through the buttock and back of thigh to the leg and foot. Sciatica is a form of back pain associated with leg pain. It follows the path of the sciatic nerve.

Causes of Sciatica

Any disease that presses on or irritates the sciatic nerve or its components can cause sciatic pain. The commonest cause of sciatica is prolapsed intervertebral disc at the lower lumbar spine, which mostly occurs at the fourth and fifth levels. The protruded disc material presses on the nerve root of that level and causes symptoms.

Causes of Prolapsed Intervertebral Disc

The main reasons for the damaged and protruded intervertebral disc at the lumbar spine are:

- Frequently carrying heavy weight or stressing the back
- 2. Poor posture
- 3. Weak lumbar spine due to genetic factors

Symptoms of Sciatica

The severity of symptoms depends on the degree of the prolapse and the pressure effecting on the nerve root. The sciatic pain is often worse with coughing and sneezing. Prolonged walking may also aggravate the pain.

Patients will also have numbness in the foot and/or on the outer side of the leg. In serious cases, there is weakness in the movement of the toes and ankle. If the patient experiences numbness in the perineal region and loss of urine and bowel control, this is an urgent situation and he/she must consult a doctor immediately.

Treatment of Sciatica

- 1. Rest: This is the most important and the best method
- 2. Analgesics
- Physiotherapy: Hot or cold packs may help.
 Ultrasound, lumbar traction and other methods are also useful

Exercises

Exercises that are appropriate for patients depend on the severity of the disease. Patients should observe the changes in the intensity or location of pain during exercises. Fluctuations in pain level is common during the treatment period. If the pain is getting worse, medical advice should be sought immediately. The following exercises may help alleviate pain:

Exercise 1

- Lie flat on the back. Bend the knees.
- Hold the left knee with both arms. Slowly bring the knee to the chest
- · Hold it for 5 seconds, and release. Repeat 5 times
- · Repeat the same with the other leg



Exercise 2

- Lie on chest. It is a first-aid exercise for acute pain
- Use hot packs to relax the back muscle
- Repeat for 5 minutes every 2 hours



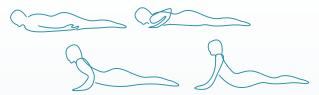
Exercise 3

- Lie on chest. Place the elbows under the shoulders and support the body with the forearms
- Relax the back
- · Hold it for 2 to 3 minutes



Exercise 4

- Lie with face down. Place the hands under the shoulders in the press-up position
- Straighten the elbows slowly. Push the body up and keep the pelvis and legs relaxed. Relax the back
- Hold it for 1 to 2 seconds and return to the starting position
- · Repeat 5 times every 2 hours



Exercise 5

- Do this exercise when back and leg pain has lessened
- · Stand upright with feet apart at shoulder width
- Place hands in support of the lower back
- Slowly bend backward and keep knees straight
- Avoid bending too much and causing pain to the back and the leg
- Hold for 1 to 2 seconds and return to the starting position
- Repeat 5 times every 2 hours

