Microdiscectomy FAQ



Microdiscectomy is a common spinal surgery performed by a spine surgeon for patients with a painful lumbar herniated disc. It consists of excising the herniated or protruding portions of the intervertebral disc that is compressing a spinal nerve root. Conventionally, the surgeon would make a large surgical incision and exposure for removing the herniated disc due to lack of microscope. That would result in a long hospital stay and a prolonged recovery period. On the contrary, **microdiscectomy** is a minimally invasive procedure; a poke-hole incision is performed to remove the disc herniation, leaving a smaller surgical wound behind, and allowing for a more rapid recovery.

Surgical Technique

This surgery is performed under general anaesthesia with preoperative intravenous antibiotics. The patient is positioned in the prone position (lying on the tummy), with padding for protection of bony prominences and joints. The lower back (surgical region) is cleansed and sterilised, and then sterile draped are placed.

A longitudinal incision (about 1.5-2cm) is made in the low back (~1cm away from midline), right above the area of the herniated disc. Without cutting the paraspinal muscle, sequential dilators and special retractors are used to expose the overlying bone (lamina of the vertebra). After the retractor is in place, an X-ray is used to confirms the appropriate intervertebral disc level.

A small part of the superior lamina (a few millimetres) is removed in order to have better visualisation and manipulation. The removal would not affect the overall spine stability. The nerve root and related structures are protected and retracted carefully so that the disc herniation can be exposed. The protruded disc is then removed by some biting or grasping instruments (e.g. pituitary rongeur). The disc and the surrounding areas are examined to ensure no loose fragments are left behind.

The deep fascial layer and subcutaneous layers are closed with a few strong sutures, and then the skin is closed by absorbable suture and special surgical glue. The sutures are all self-dissolvable and do not need removal, and the surgical glue can keep the wound water-proof.

The total surgery time is approximately 1.5 to 2 hours.

What should I expect after surgery?

You usually can sit and walk on the same day after surgery, and able to go home the next day. Before discharge from the hospital, physiotherapists will teach you the proper techniques for walking and getting out of bed.

You should avoid bending your waist, lifting a heavy object (more than 3kg), and twisting in the first 4-6 weeks in order to avoid a strain injury or recurrent disc injury/ herniation. Apart from that, prolonged sitting for more than 40 minutes in early postoperative period is also not desirable, that you should get up and stretch your back.

A soft brace (lumbar corset) is provided for additional lumbar support and comfort in the early postoperative period. Prolonged bracing is not necessary and should be avoided.

The surgical wound is covered by a water-proof adhesive dressing. You can shower immediately after surgery but should avoid bathing or water hitting directly over the surgical area. After a shower, you should dry off the surgical area with a towel and leave the adhesive dressing in place dry and intact. If the dressing is soaked through or dirty, you should remove the dressing and re-apply a new and clean one onto the wound again.

The wound usually heals at around 2 weeks after surgery. The sutures are all self-dissolved and do not need removal, and the surgical glue will slough off automatically.

Can I drive after surgery?

You may begin driving when the wound pain level has decreased to a mild level, which is about 1-2 weeks after surgery. You are not supposed to drive while taking narcotics pain medicine or in significant wound pain. You should have a short drive only and avoid driving alone when driving for the first time after surgery.

When can I return to work?

You may return to light and sedentary work duties 1-2 weeks after surgery, provided that the surgical pain has subsided. If you need to return to heavy work and sports, you should regain your back strength with physiotherapy and there is no surgical pain, which may require at least 4-6 weeks after surgery.

When will my doctor see me again?

Your doctor will see you for a follow-up visit approximately 2 weeks after surgery. The incision will be inspected and normally no stitch removal is required. Then you are required to start the physiotherapy for back exercise and rehabilitation. If needed, medications will be refilled.

What is the normal outcome of the surgery?

In general speaking, the results of **microdiscectomy** surgery in the treatment of a symptomatic (painful) herniated disc are excellent. Greater than 95% good or excellent results have been demonstrated in numerous scientific studies. Most patients can have a rapid improvement in symptoms and enjoy normal function after surgery.

Reference

- 1. Lumbar disc surgery: results of the Prospective Lumbar Discectomy Study of the Joint Section on Disorders of the Spine and Peripheral Nerves of the American Association of Neurological Surgeons. Abramovitz JN, Neff SR. Neurosurgery 1991;29:301.
- 2. Microsurgery versus standard removal of the herniated lumbar disc: a 3-year comparison in 150 cases.Barrios C, Ahmaed M, et al. Acta Orthop Scand 1990;61:399.
- 3. The Caspar microsurgical discectomy and comparison with a conventional standard lumbar disc procedure. Caspar W, Campbell B, et al. Neurosurgery 1991;28:78.
- 4. Silvers HR. Microsurgical versus standard lumbar discectomy. Neurosurgery 1988;22:837
- 5. Does microscopic removal of lumbar disc herniation lead to better results than the standard procedure? Results of a one-year randomized study. Tullberg T, Isacson J, et al. Spine 1993;18:24.

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