

Lumbar Microdiscectomy

Patient Information Guide

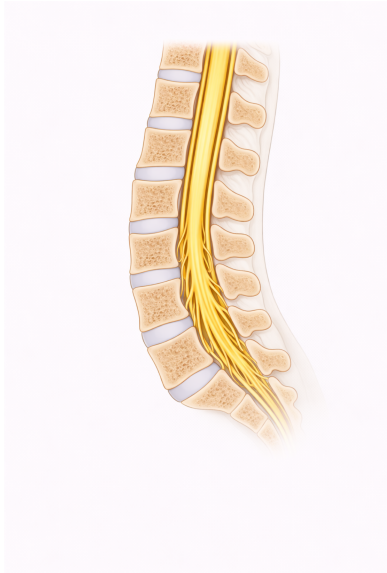
Dr. John M. Caridi, MD | Spinal Associates

1155 Park Avenue, Suite E | New York, NY | (212) 360-6500

This guide has been prepared to help you understand your upcoming surgery, what to expect during your recovery, and how to care for yourself at home. Please read it carefully and bring any questions to your visit.

1. Indications for Surgery

Lumbar microdiscectomy is recommended when a herniated (slipped) disc in the lower back is pressing on a spinal nerve root and causing significant symptoms. Surgery is typically considered after at least 6 weeks of conservative management — including physical therapy, anti-inflammatory medications, and/or epidural steroid injections — has failed to provide adequate relief, or when neurological deficits are present or worsening. Common indications include:



Lumbar spine anatomy — sagittal view showing vertebrae, discs, and nerve roots

Lumbar Radiculopathy (Sciatica)

Compression of a lumbar nerve root causing pain, numbness, tingling, or weakness that radiates from the lower back through the buttock and down the leg — commonly known as sciatica. Most often affects the L4–5 or L5–S1 levels.

Herniated / Ruptured Lumbar Disc

The inner gel-like nucleus pulposus of a disc ruptures through the outer annular ring and presses on a nearby nerve root. The herniation may be central, paracentral, foraminal, or far-lateral.

Neurogenic Claudication

Pain, cramping, or weakness in the legs brought on by walking or standing, relieved by sitting or bending forward — caused by nerve root compression in the lumbar canal.

Motor Weakness or Progressive Neurological Deficit

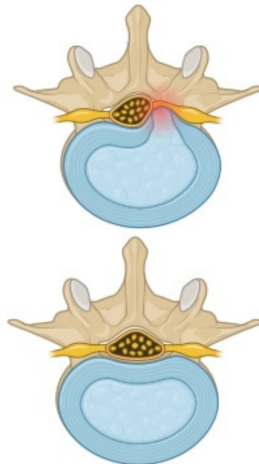
New or worsening weakness in the foot, ankle, or leg due to nerve compression. Foot drop (inability to lift the front of the foot) is a common example requiring urgent surgical consideration.

Cauda Equina Syndrome

A surgical emergency. Massive disc herniation compressing the cauda equina (the bundle of nerve roots below the spinal cord), causing bilateral leg weakness, saddle anesthesia (numbness in the groin/inner thighs), and loss of bowel or bladder control. Requires immediate surgery.

Severe or Refractory Pain

Disabling leg or back pain that has not responded to an adequate course of non-surgical treatments and is significantly impairing quality of life.



Lumbar disc herniation compressing the nerve root — the most common indication for microdiscectomy

2. About the Procedure

Lumbar microdiscectomy is a minimally invasive surgical procedure to remove the portion of a herniated intervertebral disc that is compressing a spinal nerve root in the lower back (lumbar spine). The prefix *micro* refers to the use of a surgical microscope or high-powered loupe magnification, which allows the surgeon to work through a very small incision with greater precision and less disruption to surrounding tissues compared to traditional open discectomy.

Approach	A small (1–1.5 inch) incision is made in the midline of the lower back at the affected level.
Muscle handling	The back muscles are gently moved aside (not cut) using a tubular retractor, minimizing post-operative pain and recovery time.
What is removed	The herniated fragment of disc material pressing on the nerve root is carefully removed. The remaining healthy disc is preserved.
Bone removal	A small portion of the lamina (laminotomy) and ligamentum flavum may be removed to access the disc space and decompress the nerve.
Nerve handling	The spinal nerve root is gently retracted to expose the disc herniation beneath it. It is never cut.
What stays	Unlike spinal fusion, no hardware (screws, rods, or cages) is implanted. The disc space is preserved as much as possible.
Anesthesia	General anesthesia — you will be completely asleep. The procedure is performed with you lying face-down (prone).
Duration	Typically 45 minutes to 1.5 hours depending on the size and location of the herniation.
Hospital stay	Usually same-day surgery (go home the same day) or, at most, one overnight stay.

Surgical Illustrations:



*Posterior approach — small
midline incision in the lower
back*



Microdiscectomy — herniated disc fragment removed from beneath the nerve root

3. Preparing for Surgery

Good preparation reduces your risk of complications and helps ensure the smoothest possible recovery. Please follow all of the instructions below:

- **Medical clearance:** Visit your primary care physician for a pre-operative evaluation. Inform them of all medications, supplements, and over-the-counter drugs you take. Blood work, an EKG, and other tests may be required depending on your age and medical history.
- **Medications to stop:** Stop blood thinners (warfarin, aspirin, clopidogrel, NSAIDs such as ibuprofen or naproxen) as directed by Dr. Caridi — typically 7–10 days before surgery. Do NOT stop any medication without guidance.
- **Smoking cessation:** Smoking impairs tissue healing and increases infection risk. You should stop smoking at least 2 weeks before surgery and ideally refrain throughout recovery.
- **Nothing by mouth (NPO):** Do not eat or drink anything after midnight the night before surgery (including water, gum, or mints). You may take essential morning medications with a small sip of water only if specifically instructed.
- **Bowel preparation:** No special bowel prep is required. However, over-the-counter stool softeners (MiraLAX or Colace) may be started a few days before surgery to prevent post-operative constipation from pain medications.
- **Arrange your home:** Set up a comfortable recovery area at home. Arrange pillows to support your lower back when lying or sitting. Place frequently used items at waist level to avoid bending or reaching. Remove trip hazards (rugs, cords) from walkways.
- **Transportation:** Arrange for a responsible adult to drive you home and stay with you for at least the first 24 hours. You will NOT be allowed to drive yourself home.
- **Shower the night before:** Shower with antimicrobial soap (or Dial soap) the evening before and the morning of surgery. Do not apply lotions, creams, deodorants, or makeup.
- **Valuables & clothing:** Leave jewelry and valuables at home. Wear loose, comfortable clothing you can easily put on after surgery. Loose-fitting sweatpants or elastic-waist pants are ideal.
- **Walking aids:** Most patients do not require a walker or cane, but if you have significant leg weakness prior to surgery, it may be advisable to have one available. Discuss with Dr. Caridi.

4. What to Expect After Surgery

Most patients experience significant improvement in leg pain (sciatica) shortly after surgery — often in the recovery room. Back pain at the incision site is common initially but improves over days to weeks. The following symptoms are **normal and expected**:

- **Immediate leg pain relief:** Many patients notice dramatic improvement in their radiating leg pain as soon as they wake from anesthesia. This is the most reliable indicator of successful nerve decompression.
- **Back pain at the incision:** Soreness and stiffness at the surgical site and surrounding muscles is expected and typically resolves within 1–3 weeks as the muscles heal.
- **Residual leg numbness or tingling:** Pre-existing numbness, tingling, or mild weakness may persist for weeks to months even after successful surgery, as the nerve recovers from its prior compression. This is normal — nerve healing is slow.
- **Muscle spasms:** Lumbar muscle spasms are common in the first week and can be quite intense. Gentle movement, heat, and muscle relaxants (if prescribed) help.
- **Temporary increase in leg pain:** Some patients experience a brief flare of leg pain in the first 1–2 weeks due to post-operative nerve irritation (nerve 'waking up'). This is normal and usually subsides quickly.
- **Fatigue:** General anesthesia and the body's healing process cause significant fatigue. Rest frequently and do not push yourself too hard in the first week.
- **Constipation:** Narcotic pain medications commonly cause constipation. Take stool softeners as directed and stay well-hydrated. Do not strain.
- **Incision soreness:** The incision will be tender for 1–2 weeks. Avoid positions or movements that put direct pressure on the incision site.

Expected Timeline of Recovery:

Timeframe	What to Expect
Day of surgery	Leg pain often dramatically improved upon waking. You will be up walking within a few hours. Most patients go home the same day.
Days 1–3	Incision soreness and muscle spasms peak. Walk several times per day. Pain managed with medication.
Week 1–2	Gradual improvement in back pain and spasms. Increase walking distance daily. Light daily activities resumed.
Week 2–4	Most patients feel significantly better. Return to desk work. Begin physical therapy if prescribed.
Week 4–6	Return to light physical activity. Driving typically permitted. Most restrictions lifted for uncomplicated cases.
Month 2–3	Return to more demanding activities. Physical therapy progresses. Full activity usually cleared by 3 months.
3–6 Months	Complete recovery expected for most patients. Nerve symptoms (numbness, tingling) continue to improve through 12 months.

5. Post-Operative Instructions

Activity Restrictions:

- No lifting more than 10 lbs for the first 4–6 weeks.
- No bending (at the waist), twisting, or prolonged sitting for the first 2–4 weeks. When picking something up from the floor, bend at the knees — not the back.
- No driving until cleared by Dr. Caridi — typically 1–2 weeks, and only when you are off narcotic pain medication and can react normally.
- Walking is your most important exercise — begin the day of surgery with short walks, gradually increasing distance every day.
- No running, jumping, or high-impact exercise until cleared (typically 6–12 weeks).
- No heavy gym work, contact sports, or strenuous manual labor until cleared by Dr. Caridi (typically 3–6 months for heavy work).
- Avoid prolonged sitting — take a short walk or stand up for a few minutes every 30–45 minutes.
- Do not sit in low, soft chairs or sofas that cause your hips to drop below your knees. Use a chair with firm support.
- Sleeping on your side with a pillow between your knees, or on your back with a pillow under your knees, can reduce post-operative discomfort.

Wound and Showering:

- You may shower 48–72 hours after surgery once cleared by Dr. Caridi. Let water run gently over the incision — do not scrub.
- Pat the incision dry after showering. Do not rub.
- Do NOT submerge the incision in a bathtub, pool, hot tub, or lake until fully healed (typically 4–6 weeks) and approved.
- If steri-strips are in place, allow them to fall off on their own.
- Sutures or staples will be removed at your first post-operative visit (usually 10–14 days after surgery).
- Keep the incision out of direct sunlight for at least 6 months to minimize scarring.
- Do not apply lotions, creams, or ointments to the incision unless specifically instructed.

Pain Management:

- Take pain medications as prescribed. Do not wait until pain is severe to take them.
- Acetaminophen (Tylenol) is the preferred baseline pain reliever. Do NOT exceed 3,000 mg per day.
- NSAIDs (ibuprofen, naproxen) may be used as directed — check with Dr. Caridi, as they may be acceptable for discectomy (no fusion hardware).
- Narcotic medications (if prescribed) should be taken only as needed. They cause drowsiness — do not drive or operate machinery while taking them.
- Ice packs applied to the lower back (20 minutes on, 20 minutes off) can reduce swelling and soreness in the first 72 hours. Wrap in a cloth — never directly on skin.
- Heat packs (after the first 72 hours) can relieve muscle spasms. Do not apply heat directly to the incision.
- Muscle relaxants (if prescribed) can be taken as directed for spasms.

Physical Therapy:

- Dr. Caridi will prescribe physical therapy, typically beginning 2–4 weeks after surgery once the incision has healed.
- Physical therapy focuses on core strengthening, posture, lumbar stabilization, and safe body mechanics.

- Compliance with physical therapy significantly reduces the risk of recurrent disc herniation and long-term back pain.
- Do not start a physical therapy program or gym routine without approval from Dr. Caridi.

Diet and Hydration:

- A regular diet can be resumed as tolerated once you are home. Start with light meals if you feel nauseous from anesthesia.
- Stay well-hydrated (6–8 glasses of water per day) to support healing and prevent constipation.
- High-protein foods (eggs, chicken, fish, yogurt, legumes) support tissue repair.
- Avoid alcohol while taking prescription pain medications.

Return to Work:

- Desk / sedentary work: typically 1–2 weeks.
- Light physical work (standing, light walking): typically 2–4 weeks.
- Moderate physical work: typically 4–6 weeks.
- Heavy manual labor, lifting, or prolonged bending/twisting: typically 6–12 weeks, dependent on recovery and Dr. Caridi's approval.

6. Common Complications and Risks

Lumbar microdiscectomy is one of the most commonly performed and highly successful spine surgeries, with very high patient satisfaction rates. However, as with any surgical procedure, risks exist. Dr. Caridi has reviewed your individual risk profile.

Common (occur in a small but notable percentage):

- **Recurrent disc herniation:** The most common complication — occurring in 5–15% of patients. The remaining disc material can re-herniate at the same level, sometimes requiring revision surgery. Adhering to activity restrictions and physical therapy significantly reduces this risk.
- **Post-operative back pain:** Some residual back pain is common, particularly in the first weeks. Most patients experience significant improvement compared to before surgery, but complete pain relief is not guaranteed.
- **Persistent neurological symptoms:** Numbness, tingling, or mild weakness may persist for months as nerves heal, even after successful decompression. Slow but steady improvement is expected.
- **Nerve root irritation:** Brief flare of leg pain in the early post-operative period as the previously compressed nerve heals.
- **Superficial wound infection:** Redness, swelling, or drainage at the incision site. Treated with antibiotics.

Less Common but Important Risks:

- **Dural tear (CSF leak):** A small inadvertent tear in the covering of the spinal cord (dura), which can cause headache when upright. Usually repaired during surgery or heals with bed rest. Occurs in approximately 1–5% of cases.
- **Nerve root injury:** Rare injury to the nerve root during surgery, potentially causing worsening weakness or numbness. Risk is minimized with magnification and careful technique.
- **Deep infection / discitis:** Rare but serious infection within the disc space or surgical site requiring prolonged antibiotics or repeat surgery.
- **Hematoma (epidural bleeding):** Rare accumulation of blood in the spinal canal that can compress nerves, requiring emergency drainage.
- **Wrong-level surgery:** Extremely rare. Intraoperative X-ray confirmation is routinely performed to verify the correct surgical level.
- **Cauda equina injury:** Very rare injury to the nerve bundle at the bottom of the spinal cord, potentially affecting bladder, bowel, or sexual function.
- **Deep vein thrombosis (DVT) / Pulmonary embolism:** Blood clots in the legs or lungs. Risk is minimized by early walking and compression devices.
- **Anesthesia complications:** As with any procedure under general anesthesia.

When to Call Dr. Caridi's Office or Go to the ER Immediately:

- Sudden or rapidly worsening leg weakness, numbness, or paralysis
- New loss of bladder or bowel control (bowel or bladder incontinence or retention) — seek emergency care immediately
- Severe headache that is significantly worse when sitting or standing upright
- Fever above 101.5°F (38.6°C)
- Increasing redness, warmth, swelling, or discharge from the incision
- Severe, uncontrolled pain not relieved by prescribed medication
- Chest pain, shortness of breath, or calf pain and swelling (signs of blood clot)
- Clear fluid draining from the incision (may indicate a CSF leak — call the office immediately)

This handout is for general educational purposes and does not replace the advice of your surgeon. Individual recovery varies. Always follow Dr. Caridi's specific post-operative instructions.