Cervical Disc Replacement (CDR) — Patient Guide

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What to expect before, during, and after your cervical disc arthroplasty surgery

What is a Cervical Disc Replacement?

Cervical Disc Replacement (CDR), also called cervical disc arthroplasty, is a motion-preserving surgery used to treat nerve or spinal cord compression in the neck. During this procedure, the damaged disc is removed through a small incision in the front of the neck. Instead of fusing the vertebrae, a specialized artificial disc implant is inserted to maintain natural motion at that level.

Why is CDR done?

- Relieve symptoms caused by a pinched nerve, such as arm pain, numbness, tingling, or weakness.
- Treat spinal cord compression causing difficulty with balance or coordination (cervical myelopathy).
- Maintain neck motion and reduce stress on adjacent levels compared to fusion surgery.

Benefits & Goals

- Preserve normal movement in the neck at the treated level.
- Relieve nerve or spinal cord pressure to reduce pain and improve function.
- Faster recovery and return to activities compared to fusion in many patients.
- Reduce the risk of adjacent segment degeneration over time.

Risks & Possible Complications

While CDR is generally safe, all surgeries carry some risk:

- Infection, bleeding, blood clots (DVT/PE).
- Hoarseness or temporary voice changes due to vocal cord nerve irritation.
- Difficulty swallowing, which is common in the first 1–2 weeks.
- Implant-related issues, such as loosening or wear over time (rare).
- Persistent pain or neurological symptoms despite surgery.
- Progression of posterior arthritic changes
- Nerve or spinal cord injury (rare).
- Allergic reaction or sensitivity to implant materials (very rare).

Before Surgery: How to Prepare

7–10 Days Before Surgery

- Stop taking medications on the 'Medications to Avoid' list, especially NSAIDs and blood thinners.
- Consult with your prescribing doctor before stopping any medication.

1–3 Days Before Surgery

- Arrange transportation and someone to help you for the first few days after surgery.
- Prepare your home for safety by clearing walkways and setting up a comfortable rest area.

Night Before / Day of Surgery

- Follow fasting instructions carefully (nothing to eat or drink after midnight unless told otherwise).
- Shower as instructed and do not apply lotions or oils to the neck area.
- Bring your ID, insurance card, and medication list.
- Leave valuables and jewelry at home.
- Avoid all nicotine products — they interfere with healing and increase risks.

Day of Surgery: What to Expect

- Meet with your surgical and anesthesia team to review the procedure.
- Surgery is done through a small incision at the front of the neck.

- The damaged disc is removed to relieve pressure on nerves or spinal cord.
- An artificial disc implant is placed to maintain motion.
- Most patients go home the same day or after an overnight stay.

After Surgery: The First Weeks

Pain & Medications

- Neck and throat soreness are normal and should gradually improve.
- Your care team will provide a multimodal pain management plan to minimize narcotic use.
- Avoid NSAIDs unless your surgeon specifically approves them, as they can affect healing.

Swallowing & Throat Care

- Mild difficulty swallowing is common in the first few weeks.
- Eat soft foods and stay hydrated.
- Call the office immediately if swallowing suddenly worsens or you cannot swallow liquids.

Brace Use

- Most patients do NOT need a cervical brace after CDR.
- If prescribed for comfort, wear as directed by your surgeon.

Activity & Mobility

- Start walking the day of or day after surgery to prevent stiffness and blood clots.
- Avoid heavy lifting (>10 lbs), bending, twisting, or strenuous activities for the first 4–6 weeks.
- Gentle neck motion is encouraged, but avoid extreme positions or sudden jerks.
- Do not drive while taking narcotic pain medicine or until you can comfortably turn your head.

Incision Care

- Keep the incision clean and dry.
- You may shower after your surgeon says it is safe. Pat dry gently.
- Do NOT apply creams, ointments, or lotions.
- No soaking in baths, pools, or hot tubs for 6 weeks.

Bowel Function & Nutrition

- Constipation is common after surgery due to anesthesia and pain medication.
- Drink fluids, eat fiber-rich foods, and use stool softeners or Miralax as directed.

Bracing & Physical Therapy

- No routine brace is required for most CDR patients.
- Formal physical therapy usually starts 6 weeks after surgery once cleared by your surgeon.
- Focus early on posture and gentle, frequent walking.

Return to Work & Activities

- Desk jobs: usually 1–2 weeks depending on comfort and pain levels.
- Light duty: 2–4 weeks.
- Heavy labor: 6–8+ weeks, only after clearance.
- Driving: resume once off narcotics and able to safely turn your head.
- Sexual activity: typically safe after 1–2 weeks, avoiding painful positions.

Follow-Up Schedule

- First visit: approximately 2 weeks after surgery for incision check and progress review.
- Second visit: around 6 weeks to evaluate motion and healing.
- Further visits at 3 months and as needed to ensure implant stability and function.

When to Call the Office Immediately

- Fever over 101.5°F (38.6°C) or chills.
- Sudden increase in difficulty swallowing or breathing.
- Redness, swelling, or drainage at the incision site.
- New or worsening arm or leg weakness, numbness, or tingling.
- Severe, unrelieved pain.
- Signs of allergic reaction such as rash or swelling.

Frequently Asked Questions

Will I still have normal neck motion after surgery?

The goal of CDR is to preserve natural neck motion, unlike fusion surgery where motion at that level is lost.

Will I need to wear a neck brace?

Most patients do not require a brace, but a soft collar may be given for short-term comfort if needed.

How soon can I return to activities?

Many patients return to light activities within 1–2 weeks, but heavy lifting and strenuous exercise are restricted for at least 6 weeks.

Will the artificial disc set off airport metal detectors?

Most artificial discs do not trigger detectors, but it is possible. If asked, explain you have a cervical implant.