WASHINGTON BRAIN & SPINE INSTITUTE

Cervical Disc Replacement (CDR / Cervical Arthroplasty)

Postoperative Patient Instructions & Recovery Guide

Provider: Lekhaj Daggubati, MD | Phone: **301.718.9611**

ROCKVILLE	TYSONS	FREDERICK	WHITE OAK
3202 Tower Oaks Boulevard, Suite 100 Rockville, MD 20852	8605 Westwood Center Drive, Suite 201 Vienna, VA	198 Thomas Johnson Drive, Suite 17 Frederick, MD 21704	11886 Healing Way, Suite 401 Silver Spring, MD 20904

Welcome Home

You have just undergone a **cervical disc replacement (CDR)** — a motion-preserving procedure that removes a damaged disc and replaces it with an artificial implant. This guide explains what to expect over the coming days, weeks, and months — and tells you when to call us.

Expected Recovery Timeline

Timeframe	What to Expect
First 24–48 hours	Sore throat, mild hoarseness, mild–moderate neck discomfort, difficulty with solid food. Arm pain often dramatically better immediately.
Days 3–7	Swallowing improves daily. Most patients off opioids by end of week 1. Gentle neck motion is encouraged.
Weeks 2–4	Return to driving, return to desk work. Walking 30+ minutes daily. Swallowing close to normal. Begin gentle range-of-motion exercises.
Weeks 4–6	Most pre-surgical symptoms continue to improve. Return to most light activities. Physical therapy may begin (often earlier than after fusion).
Months 2–3	Return to most pre-surgery activities including light sports. Full neck

	motion is the goal.
Months 3–6	Most patients return to all activities, including higher-impact sports, with surgeon clearance.
Months 6–12+	Continued improvement in residual numbness/tingling can occur. Long-term motion preservation is the goal.

Activity Instructions

You CAN Do (and Should!)

- **Walk** — start the day of surgery. Goal: 20–30 minutes 2–3 times daily by the end of week 1.
- **Gentle neck range-of-motion exercises** beginning the first week — this is **encouraged** to maintain the motion the implant is designed to preserve.
- **Shower** after 48 hours.
- **Ride in a car** as a passenger.
- **Light household tasks** — meals, walking the dog, light tidying.
- **Read, work on a computer, watch TV** — take breaks every 30–45 minutes.

You Should AVOID

- **No lifting more than 20 pounds** for 3 weeks
- **No driving** until off all opioid pain medication AND comfortable rotating the neck to check blind spots — usually 5–10 days.
- **No high-impact sports** (running, contact sports, gymnastics) for 6 weeks.
- **No swimming or submerging the wound** for 3 weeks.
- **No alcohol** while on opioids or muscle relaxants.
- **No smoking, vaping, or any nicotine products.**

No Cervical Collar Needed (Usually)

Unlike fusion patients, CDR patients do **not** typically wear a cervical collar. The artificial disc is immediately stable, and motion is desirable. If a collar was prescribed for your specific case, wear it as instructed.

Return-to-Activity Milestones

Milestone	Timing	Details
Walking	Day 1+	Daily walks; faster recovery than fusion.
Showering	POD #2	Remove dressing; pat dry. No submersion for 3 weeks.
Driving	2–3 weeks	Once cleared at first follow-up and off opioids.
Desk work	1 week	Most CDR patients return quickly.
Light physical activity	3–4 weeks	Gentle stretching, light yardwork.
NSAIDs (encouraged)	Immediately	Reduce heterotopic ossification risk — take with

		food.
Sexual activity	1–2 weeks	When comfortable.
Manual labor / lifting	6–8 weeks	Earlier return than ACDF — disc is mobile, not fused.
Sports (low-impact)	4–6 weeks	Swimming, cycling, golf.
High-impact sports	3 months	Most full activity restored by 3 months.

Going Home — Your Discharge Instructions

What to Expect in the First 2 Weeks

Most patients experience moderate soreness around the incision, some fatigue, and a gradual return of energy. **Pain is normal and expected** — most patients describe a 5–7/10 the first few days, improving steadily. Your job is to follow the medication schedule below, walk regularly, eat enough protein, and protect the surgical site. Call us with any concerns — even minor ones. We would rather hear from you than have you worry.

Your Discharge Medications

You will be sent home with the following medications. **Specific doses on your prescription bottle take precedence over this general guide.** Take medications as prescribed.

Medication	Dose & Schedule	Important Notes
Oxycodone (5 mg)	1 tablet every 4–6 hours as needed for severe pain (pain ≥ 7/10)	Take only when acetaminophen and an NSAID together are not controlling pain. Stop as soon as you are able — typically within 5–10 days. Do not drive or drink alcohol while taking. Causes constipation — use the bowel regimen on the next page.
Ondansetron (Zofran) 4 mg	1 tablet by mouth every 8 hours as needed for nausea	Dissolves on the tongue or swallows with water. Do not exceed 24 mg in a day. Stop when nausea resolves.
Cyclobenzaprine (Flexeril) 5–10 mg	1 tablet at bedtime as needed for muscle spasm	Can cause significant drowsiness — take only at bedtime to start, and do not drive after taking. May be increased to three times daily under direction. Stop when muscle spasm resolves, usually within 1–2 weeks.

Layered (Multimodal) Pain Control with Over-the-Counter Medications

Use these in combination with the prescription medications above. **The goal is to control pain with the least amount of opioid possible** — these medicines work through different mechanisms, so combining them is more effective than any single one alone.

Medication	Dose & Timing	Notes
Acetaminophen (Tylenol) 500–1000 mg	1–2 tablets (500 mg each) every 6 hours **around the clock for the first week**, then as needed. Do not exceed 3,000 mg in 24 hours.	Safe for most patients. Use the regular Tylenol (not extra-strength) and add it up carefully. Do not combine with other products that contain acetaminophen (Norco, Percocet, NyQuil, etc.) without counting the dose.
Ibuprofen (Advil, Motrin) 400–600 mg	1 tablet every 6–8 hours with food, as needed.	**NSAIDs (ibuprofen, naproxen) are encouraged** after cervical disc replacement — they reduce the risk of heterotopic ossification (unwanted bone formation around the artificial disc). Begin once approved by your surgeon, typically immediately or within a few days. Take with food. Avoid if you have kidney disease, ulcers, or bleeding disorders.
Naproxen (Aleve) 220–440 mg	1–2 tablets every 12 hours with food, as needed (alternative to ibuprofen — do not combine the two).	Longer-acting NSAID — convenient for steadier coverage. Same restrictions as ibuprofen.

Recommended pattern for the first week

Acetaminophen 1000 mg every 6 hours, around the clock (set a timer; do not skip doses). **Add a layered NSAID dose once permitted** for breakthrough discomfort. **Use the opioid only when these together are not controlling pain** — typically for severe pain at night or before walking. **Take cyclobenzaprine at bedtime** for muscle spasm.

Bowel Regimen

Opioids and anesthesia almost always cause constipation. Start a softener on day 1; if no bowel movement by day 3, escalate as below. Do not wait for severe symptoms.

- **Days 0–2 (baseline):** Take **docusate sodium (Colace) 100 mg twice daily** while taking opioids. Drink 2–3 liters of water daily, eat fiber (fruit, vegetables, whole grains, prunes), and walk frequently.
- **If no bowel movement by POD #3:** Add **senna (Senokot) 2 tablets at bedtime** AND **MiraLAX (polyethylene glycol) 17 g** (one capful) in 8 oz of water once daily.
- **If no bowel movement by POD #5:** Add **bisacodyl (Dulcolax) 10 mg** — either suppository or oral tablet.
- **If no bowel movement by POD #7: call our office.** We may add additional measures (magnesium citrate, enema, or evaluation for obstruction).

Stop the bowel regimen once you are off opioids and having regular bowel movements again.

Showering & Wound Dressing

You may shower starting on postoperative day 2. Remove the surgical dressing before showering — the incision can get wet. Let warm water run gently over the front of your neck; **do not scrub**, do not use a

washcloth or loofah directly on the wound. Pat dry. **Do not submerge** in a bathtub, hot tub, or pool for at least 3 weeks. Do not apply ointments, peroxide, alcohol, or lotion to the incision. If Steri-Strips are present, let them fall off on their own (7–14 days).

Call about the wound if you see...

Redness spreading beyond the incision, drainage of pus or cloudy fluid, opening of the wound edges, increasing pain or swelling, fever over 101.5°F, or any clear fluid leak (possible CSF leak).

Driving

Do not drive until cleared at your first postoperative follow-up appointment (2–3 weeks). You may not drive while taking opioid pain medication, cyclobenzaprine, or other sedating medications. Riding as a passenger is fine immediately.

Once cleared to drive, start with short trips in familiar areas. **Do not drive while taking opioid pain medication, cyclobenzaprine, or other sedating medications.** Riding as a passenger is fine immediately.

Return to Work

Desk work: 1 week. Light physical work: 3–4 weeks. Manual labor / heavy lifting: 6–8 weeks with clearance. These are typical ranges — your individual return-to-work clearance depends on your job demands, recovery, and surgeon assessment at follow-up. **Bring any disability forms or return-to-work letters to your follow-up appointment** and we will complete them at that time.

Follow-Up Appointments

- **First postoperative visit at 2–3 weeks.** Wound check, suture or staple removal if needed, medication review, and review of recovery progress.
- **Second postoperative visit at 6–8 weeks.** Activity advancement, return-to-work clearance, and (for fusion cases) X-rays to assess early fusion.
- **Three-month visit** for final recovery assessment and return to all activities.

Call **301.718.9611** during business hours to schedule or reschedule. Our after-hours answering service will reach the on-call provider for urgent issues.

Recovery Optimization Protocol

Targeted nutrition, sleep, and stress management substantially accelerate recovery and reduce complications. The following protocols are evidence-based and apply throughout your recovery period.

Postoperative Nutrition

- **Protein: 1.2–1.5 g/kg/day** to support tissue healing.
- **Vitamin D 2000 IU daily** — supports tissue healing.
- **Vitamin C (500–1000 mg/day)** — supports collagen synthesis and wound healing.
- **Zinc (15–30 mg/day)** — accelerates wound healing.
- **Hydration: 2–3 liters of water daily.** Aids wound healing, prevents constipation, and supports kidney clearance of pain medications.
- **Foods that support healing:** lean proteins (eggs, fish, poultry, Greek yogurt, legumes), leafy greens, berries, nuts, seeds, fatty fish (salmon, sardines), olive oil, whole grains.
- **Foods to limit or avoid:** alcohol (impairs healing, interacts with pain medications), ultra-processed foods, refined sugars, trans fats, excessive caffeine, sugary drinks.

Sleep Optimization

- **Target 7–9 hours nightly.** Sleep is when most tissue healing occurs. Sleep deprivation amplifies pain perception.
- **Sleep hygiene basics** — consistent bedtime and wake time, dark/cool/quiet bedroom, no screens 30 minutes before bed, no caffeine after noon.
- **Position recommendations: Use a small neck-supportive pillow.** Sleep on your back or side, not on your stomach. A recliner is often the most comfortable position for the first 1–2 weeks after posterior cervical surgery.
- **Melatonin 1–3 mg** 30–60 minutes before bed is reasonable for short-term sleep difficulty. Avoid alcohol or benzodiazepines as sleep aids.
- **If you use CPAP, continue every night.** Untreated sleep apnea impairs healing and increases cardiovascular risk.
- **When to call us:** insomnia lasting beyond 2 weeks despite good sleep hygiene, new-onset severe nightmares, or daytime confusion.

Stress and Pain Self-Management

"Hurt does not equal harm." Postoperative pain is your body's signal that healing is underway — not that damage is occurring. Modern pain neuroscience shows that how we **interpret** pain significantly affects how intensely we experience it. Patients who catastrophize ("this pain means something is wrong") report worse outcomes than those who reframe pain as part of recovery.

- **4-7-8 breathing** — inhale through the nose for 4 seconds, hold for 7 seconds, exhale through the mouth for 8 seconds. Repeat 4 cycles. Practice 2–3 times daily and whenever pain spikes.
- **Progressive muscle relaxation** — starting at your feet, tense each muscle group for 5 seconds, then release. Work your way up to your shoulders and face. Takes about 10 minutes and is excellent at bedtime.
- **Mindfulness apps: Calm, Headspace, Insight Timer** all offer free guided meditations specifically for pain, sleep, and surgical recovery.

- **Postoperative blues are normal** — many patients experience an emotional dip around days 3–7. If low mood persists beyond 2–3 weeks, or if you have thoughts of self-harm, contact us or call **988** (Suicide and Crisis Lifeline).

Warning Signs — When to Call or Go to the ER

🚨 **CALL 911 IMMEDIATELY FOR:**

• Severe difficulty breathing or noisy breathing (stridor) • Rapid, severe neck swelling • Chest pain, severe shortness of breath, or coughing up blood • Sudden weakness or numbness in arms or legs • Loss of bowel or bladder control • Inability to swallow your own saliva • Sudden severe headache, slurred speech, facial droop

⚠️ **CALL OUR OFFICE WITHIN 24 HOURS FOR:**

• Fever > 101.5°F • Worsening pain not controlled by medication • Redness, drainage, or opening of the incision • Worsening swallowing difficulty • Hoarseness lasting more than 3 weeks • Calf swelling, redness, or tenderness (blood clot) • Nausea or vomiting preventing medication intake • Constipation > 4 days despite stool softeners

Long-Term Outlook

CDR has excellent long-term results in properly selected patients. Studies show 10-year revision rates of 5% or less, and lower rates of adjacent segment disease compared to fusion. The artificial disc is designed to last for decades. **Maintain good neck posture, regular low-impact exercise, healthy weight, and avoid smoking — these are the best long-term investments.**

Future considerations: The artificial disc contains metal, so MRI may produce some local artifact. The implant is generally MRI-compatible. Carry your implant card if traveling — some metal detectors may be triggered.

Contact Information

Provider: Lekhaj Daggubati, MD

Practice: Washington Brain & Spine Institute

Main Phone (All Locations): 301.718.9611 — business hours

After-Hours / Urgent Concerns: 301.718.9611 — answering service will contact the on-call provider

Clinical Office Locations

Rockville: 3202 Tower Oaks Boulevard, Suite 100, Rockville, MD 20852

Tysons: 8605 Westwood Center Drive, Suite 201, Vienna, VA

Frederick: 198 Thomas Johnson Drive, Suite 17, Frederick, MD 21704

White Oak: 11886 Healing Way, Suite 401, Silver Spring, MD 20904

Emergency: Call **911** or proceed to the nearest emergency department for life-threatening symptoms — severe difficulty breathing, sudden weakness or paralysis, loss of consciousness, seizure, severe sudden headache, chest pain, or stroke-like symptoms.