WASHINGTON BRAIN & SPINE INSTITUTE

Ventriculoperitoneal (VP) Shunt Placement

Postoperative Patient Instructions & Recovery Guide

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Welcome to Your Recovery

You have had a ventriculoperitoneal (VP) shunt placed. The shunt is a permanent implanted device, and this document explains how to care for your incisions, recognize warning signs of malfunction or infection, and resume normal activities. Please keep your shunt identification card with you at all times.

Expected Recovery Timeline

Timeframe	What to Expect
Day 0–1 (hospital)	Pain controlled with oral medication. Mobilization same day. Postoperative imaging confirms catheter position.
Days 1–3	Discharge home. Mild incisional discomfort. Fatigue common.
Week 1–2	Incision healing. Headaches may persist as pressure normalizes. Symptoms gradually improve.
Weeks 2–6	Most patients return to normal activities. Symptom improvement (gait, cognition, urinary, visual) often progresses over weeks to months.
3–6 months	Maximum benefit typically reached. Programmable valve adjustments may be made if symptoms suggest over- or under-drainage.
Long-term	Lifelong shunt — periodic follow-up, especially in the first year (highest malfunction risk).

Activity Instructions

What You CAN Do

- Walk daily and resume light activity right away.
- Climb stairs with a handrail.
- Shower after 48 hours.
- Read, watch TV, use computers and phones.
- Light household tasks.
- Resume sexual activity when comfortable, generally after 2–3 weeks.

What You Should AVOID

- **No Weight restrictions-** cautiously escalate as tolerated
- **No driving** for 1–2 weeks and not while on narcotics; cleared by surgeon.
- **No swimming, hot tubs, or submerging incisions** for 4 weeks.
- **No contact sports** for 4–6 weeks; some sports (boxing, MMA) discouraged indefinitely.
- **Avoid wearing tight headbands or hats** that compress the valve.
- **Minimize magnets near the valve**

Return-to-Activity Milestones

Milestone	Timing	Details
Walking	Day 1+	Up and walking the day of surgery in most cases.
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	1–2 weeks	Most patients return quickly.
Light physical activity	3–4 weeks	Light household activity, walking.
Manual labor / lifting	6 weeks	Avoid bending and straining initially.
Air travel	2–4 weeks	Programmable valves are not affected by airport security.
Sports	6+ weeks	Avoid contact sports indefinitely — head impact can damage shunt.

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.

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 may be resumed 2 weeks after surgery** if approved by your surgeon. Take with food. 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.

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 incision and the rest of your scalp; **do not scrub the incision**, do not use a washcloth or loofah directly on the wound, and do not submerge the incision in a bathtub. Pat the area dry with a clean towel. **Do not apply ointments, peroxide, alcohol, or lotion to the incision** unless specifically directed. After showering, the incision can be left open to air — no dressing is required.

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.

Return to Work

Desk work: 1–2 weeks. Light physical work: 3–4 weeks. Manual labor: 6 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.

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.

Living With a Shunt

Programmable Valve Considerations

If your shunt has a programmable valve, the pressure setting can be adjusted noninvasively with an external magnet by your surgeon. However, **external magnetic fields can inadvertently reset the valve**:

- **Avoid placing magnets near your head** — refrigerator magnets, magnetic jewelry, magnetic clasps, magnetic phone holders, headphones with magnets in the ear cups.
- **MRI scans up to 3 Tesla are generally safe**, but the valve setting MUST be checked and reset after any MRI. Bring your shunt card and notify the radiology technologist.
- **Airport security and metal detectors** are safe.
- **Most household and consumer electronics** are safe.

Shunt Identification Card

Carry your shunt identification card at all times. It documents the type of shunt, valve model, pressure setting, and the implanting surgeon. Show it before any MRI, dental work, or hospital visit.

Medical Procedures

- **Antibiotic prophylaxis** before dental procedures is generally NOT required for VP shunts but is sometimes recommended for the first 6 months — discuss with your surgeon.
- **Future abdominal surgery** can be safely performed; alert the surgeon to the peritoneal catheter.
- **Pregnancy** is safe with a VP shunt; revision is occasionally required postpartum if catheter retracts.

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: Sleep with the head of the bed elevated 30 degrees** for the first 1–2 weeks to reduce facial/scalp swelling. Avoid pressure on the surgical side for 2 weeks.
- **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.

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 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:** 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 4-6weeks, or if you have thoughts of self-harm, contact us.

Warning Signs — Shunt Malfunction

SIGNS OF SHUNT MALFUNCTION OR INFECTION — CALL US OR GO TO THE ER

Malfunction (obstruction or disconnection): • Recurrence of original symptoms (headache, nausea, vomiting, vision changes, drowsiness, confusion, gait worsening) • "Sundowning" or downgazing eyes (in children) • Bulging fontanelle (in infants) **Infection:** • Fever > 101.5°F • Redness, warmth, drainage, or tenderness along the shunt tract • Neck stiffness, severe headache, photophobia (meningitis signs) • Abdominal pain, distension, vomiting (peritoneal infection or pseudocyst) **Overdrainage:** • Severe headache that improves dramatically when lying down • Nausea or vomiting only when upright These symptoms require urgent evaluation. Do not wait. Bring your shunt card.

Call Our Office Within 24 Hours

- Mild redness or tenderness at any incision
- Persistent low-grade fever
- Questions about activity, medications, or symptoms
- Concerns about valve settings or MRI scheduling

Key Reminders

- **Carry your shunt card** at all times.
- **Keep magnets away from your head**, especially if you have a programmable valve.
- **Notify any healthcare provider** that you have a shunt before any procedure or imaging.
- **Know your warning signs** and seek care promptly for any concerning symptoms.

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.