WASHINGTON BRAIN & SPINE INSTITUTE

Craniotomy for Hematoma Evacuation

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 to Your Recovery

You (or your loved one) have undergone surgical evacuation of a subdural hematoma. Recovery varies depending on whether the hematoma was acute or chronic, the patient's age and baseline function, and any associated brain injury. This document outlines what to expect, how to care for yourself or your loved one, and when to seek urgent help.

This guide applies to both subdural hematoma (SDH) and intracranial hemorrhage (ICH) evacuations. Both involve craniotomy-based evacuation of an abnormal blood collection, and recovery principles are largely shared. Where the two diverge — such as the heightened importance of blood pressure control after ICH and the greater seizure risk after lobar/cortical bleeds — this is noted specifically.

Expected Recovery Timeline

Timeframe	What to Expect
Days 1–3 (hospital)	ICU or neurosurgical floor monitoring. Subdural drain may be in place 24–72 hours. Mobilization with PT/OT begins early.
Days 3–7	Discharge home, to rehab, or to skilled nursing depending on recovery. Headache, fatigue, mild confusion common.
Weeks 1–2	Energy levels low. Gradual return to daily activities. Avoid lifting and strenuous activity. Mental fog may persist.
Weeks 2–6	Most neurologic symptoms improve. Cognitive function continues to recover. Most patients return to office work in this window.

Weeks 6–12	Steady improvement. Most return to regular activities. Surveillance CT or MRI to assess for recurrence.
3–6 months	Final neurologic recovery for most patients. Elderly patients with significant baseline injury may have longer recovery or residual deficits.

Blood Pressure Control — Critical After ICH

If your craniotomy was for an **intracranial hemorrhage (ICH)**, strict blood pressure control is the single most important factor in preventing re-bleeding and supporting your recovery. Hypertension is the leading cause of primary ICH, and uncontrolled blood pressure in the early postoperative period substantially increases the risk of a second bleed.

- **Target blood pressure: typically <140/90, often <130/80** — your surgeon will give you a specific target based on your case
- **Check your blood pressure twice daily** for the first 4 weeks (morning and evening); keep a log to bring to follow-up
- **Take all blood pressure medications exactly as prescribed** — do not skip doses, even if your BP reading looks normal
- **Call our office if systolic BP > 160 or diastolic BP > 100** on two consecutive readings, or if any single reading exceeds 180/110
- **Low-sodium diet** — limit added salt, processed foods, restaurant meals; target <2 g sodium daily
- **Limit caffeine** to 1 cup of coffee or equivalent daily for the first 4 weeks
- **No alcohol** for at least 4 weeks; thereafter, limit to occasional moderate use
- **No nicotine in any form** — nicotine causes acute hypertension

Seizure Precautions (Especially After ICH)

The risk of seizure is elevated after any craniotomy involving the cortex — and is substantially higher after lobar or cortical intracranial hemorrhage. If you have been prescribed an antiseizure medication (such as levetiracetam/Keppra or lacosamide/Vimpat):

- **Take every dose as prescribed.** Do not stop without explicit instruction, even if you feel well — abrupt discontinuation can precipitate a seizure.
- **Typical duration is 6–12 months**, depending on bleed location and your specific risk profile
- **Notify all your healthcare providers** that you are taking this medication, as there can be drug interactions
- **Driving restrictions** apply for at least 6 months after any cortical hemorrhage, and longer if you have had a seizure — Maryland and Virginia have specific reporting requirements your surgeon will review with you
- **Avoid sleep deprivation, excessive alcohol, and known seizure triggers**

If you have a witnessed seizure, lose consciousness, or develop new focal neurologic symptoms — call 911 immediately.

Activity Instructions

What You CAN Do

- **Walk** daily on flat ground. Walking promotes circulation and prevents complications.
- **Climb stairs** slowly, using a handrail and supervision if unsteady.
- **Light household tasks** as tolerated.
- **Read, watch TV, use phones/computers** in short intervals — mental fatigue is common.
- **Shower** after 48 hours (let water run over incision; pat dry).
- **Resume gentle range-of-motion activities** as cleared by therapy.

What You Should AVOID

- **No lifting greater than 10 pounds** for 6 weeks.
- **No bending forward at the waist** or straining (prevent constipation aggressively).
- **No driving** for at least 2 weeks AND while on narcotics AND until cleared by your surgeon. State-mandated seizure-free periods apply if seizures occurred.
- **No falls** — fall prevention is critical. Remove rugs, install grab bars, use a walker if recommended.
- **No alcohol** for 4 weeks (and never with antiseizure or narcotic medications).
- **No swimming, bathtubs, hot tubs** for 4 weeks.
- **No contact sports or activities with fall risk** — discuss with surgeon, especially if bone flap is out.
- **No air travel** for 2 weeks without surgeon clearance (longer if pneumocephalus seen on imaging).

Fall Prevention — Especially Important

A second fall is the most common cause of subdural hematoma recurrence. Even minor head impact can cause re-bleeding.

- Remove tripping hazards (rugs, cords, clutter).
- Install grab bars in the bathroom and a shower bench if needed.
- Use a walker or cane as prescribed.
- Address vision and hearing impairments.
- Review all medications with your primary care physician for fall-risk side effects.

Return-to-Activity Milestones

Milestone	Timing	Details
Walking	Day 1+	Short walks daily; build endurance gradually.
Showering	POD #2	Remove dressing; pat dry. No submersion for 3 weeks.
Driving	Variable	Cleared at follow-up. Seizure history extends restrictions per state law.
Desk work	4–6 weeks	If cognitively and neurologically cleared.
Light physical activity	8–12 weeks	Light household activity, walking.
Blood pressure check	Twice daily	Critical after ICH for first 4 weeks.
Physical work	8–12 weeks	With surgeon clearance.
Sports (low-impact)	8–12 weeks	Swimming, cycling, walking — once wound fully

		healed.
Contact sports	Avoid	Re-injury can cause re-bleed — discuss with surgeon.

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.
Levetiracetam (Keppra) 500 mg	1 tablet by mouth twice daily for 7 days (if no prior actual seizure)	Seizure prophylaxis after evacuation of subdural hematoma or intracranial hemorrhage. Continue for the full course. **If you had a seizure before or after surgery, the duration will be longer — follow your individualized schedule.** If you have a new seizure, call 911 and our office immediately.

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)	1 tablet every 6–8 hours with	**Avoid NSAIDs for the first 2 weeks** after

400–600 mg	food, as needed.	intracranial surgery due to bleeding risk. After that, they may be resumed unless contraindicated. Confirm with your surgeon. 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). **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. **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: 4–6 weeks if cognitively and neurologically cleared. Physical work: 8–12 weeks with clearance. Driving restrictions may apply if seizure risk. 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.
- **CT scan at the 2–3 week visit** to confirm resolution and rule out recurrence.
- **6-month follow-up** with imaging to confirm sustained resolution.

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.

Helmet Use (If Bone Flap Removed)

CRANIECTOMY PATIENTS

If your bone flap was removed (craniectomy), you MUST wear your custom-fitted helmet whenever you are out of bed — including walking, sitting up, eating, and using the bathroom. The helmet protects your brain until cranioplasty is performed. Sleep with the helmet off only when lying flat in bed with supervision. Cranioplasty is typically scheduled 6–12 weeks after the initial surgery.

Cognitive and Mood Recovery

- **Mental fatigue** is universal — plan short bursts of activity with rest.
- **Memory and attention difficulties** may persist for weeks to months.
- **Mood swings, irritability, depression, or anxiety** are common, particularly in elderly patients.
- **Engage in cognitive activities** — reading, puzzles, conversation — but pace yourself.
- **Sleep schedule** may be disrupted; aim for regular bedtime and adequate rest.
- Consider outpatient neuropsychological evaluation if cognitive symptoms are concerning.

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 intracranial pressure and facial/scalp swelling. Avoid lying flat. 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.
- **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 Us or Go to the ER

CALL 911 OR GO TO THE EMERGENCY DEPARTMENT IMMEDIATELY

• New or worsening headache (especially severe, sudden, or unresponsive to medication) • New weakness, numbness, facial droop, or speech difficulty • Seizure • Loss of consciousness, extreme drowsiness, or marked confusion • Persistent vomiting • Stiff neck with fever > 101.5°F • Clear fluid leaking from the incision, nose, or ear • Any fall, especially with head impact • Chest pain, shortness of breath, or unilateral leg swelling

Call Our Office Within 24 Hours

- Fever 100.4–101.5°F
- Incision redness, drainage, separation, or increased swelling
- Mild confusion, increased fatigue, or new mild headache
- Constipation > 4 days or urinary problems
- Questions about medications, blood thinners, or activity restrictions

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.