

Discharge Guidelines

Lower Extremity Amputation

Femur/Tibia

Please note: These are general guidelines to help answer the most common questions after surgery. The photos in these guidelines WILL NOT necessarily match your exact surgical site. Your surgeon/team may ADAPT these guidelines depending on YOUR SPECIFIC NEEDS and/or current research.



Above-knee-amputation (AKA) or transfemoral amputation.



Below-knee-amputation (BKA) or transtibial amputation with TMR*.

***Note:** Targeted Muscle Reinnervation (TMR) is becoming the standard of care for amputations of the upper and lower extremity. The TMR is a surgical technique involving the transfer of residual peripheral nerves in the amputated limb to muscle motor nerves, restoring physiological continuity and encouraging nerve growth. This technique reduces phantom pain and enhances prosthetic tolerance.

Daily Incision Care

- If your amputation included TMR (see above), most ace wrap dressings are left intact until the first post-operative visit with Dr. Eberlin. Otherwise, look at your incision and check for openings, drainage, swelling, redness, any changes in color or bleeding. If you detect any of the above problems, contact your surgeon's office.
- You may shower, but be careful! Use handrails or ask for assistance to avoid falling. Do not bathe or swim until your stitches are removed. Avoid hot tubs.
- Stitches or staples are removed 2-3 weeks after surgery. Steri-strips (white strips of paper tape) will then be placed over the incision. The steri-strips will fall off with gentle rubbing. If the strips are still on after 10 days, you may remove them yourself. Sometimes, dissolvable sutures are used, especially with children.
- Once the stitches are removed, you can use vitamin E lotion, aloe cream or any moisturizer to massage your incision.
- Remove ace bandages or shrinker sock 2-3 times a day and massage your residual limb (stump). This will reduce sensitivity. Then reapply ace bandages or shrinker sock, which will help decrease the swelling.
- A visiting nurse may come to your house for a few visits to assist you with your incision care.

Activity

- If you had a below-the-knee amputation with TRM, you will be discharged wearing a brace, locked in extension until further notice by Dr. Eberlin.
- A physical therapist (PT) may come to your house to help you with gait training, safety issues, ace bandage wrapping and exercises.
- Use your supports (crutches, walker, cane) as instructed.
- Continue daily exercises as instructed by your PT.
- Patients who wish to get a prosthesis should meet with their prosthetist while they are healing to discuss the type of prosthetic, insurance coverage, etc, BUT should not put any weight on their limb until cleared by Dr. Eberlin (due to the TMR procedure).
- Most patients begin fittings 6-8 after surgery. If you do not allow the postoperative swelling in your residual limb (stump) to decrease before you start wearing a prosthetic leg, it may cause pain or skin breakdown.
- Keeping your balance can be challenging. Take precautions to avoid falling. Watch out for electrical cords, wet or uneven floors, floor mats/rugs that may slide. Use night-lights to keep rooms lit, especially if you get up during the night to use the bathroom. Use handrails as a balancing aid whenever possible.
- In general, for patients recovering from amputations of the lower extremities, we recommend against heavy lifting, prolonged standing or walking, stair climbing, and participating in recreational sports until you are properly fitted with your prosthesis.
- Return to driving varies by patient and depending upon which leg is operated on. If your left lower extremity is amputated, you may be able to drive sooner than if it was your right. In the case of your right leg being amputated, you may need to purchase a hand device to aid in driving. Either way, once you have received medical clearance from your surgeon, you should contact the RMV to be sure you are eligible to drive by their standards.

Diet

- Your appetite may be less than normal after surgery.
- Incorporate proteins and plenty of fluids into your diet, both of which will help in the healing process.
- If you are taking narcotics, you should take some type of laxative to prevent opioid-induced constipation.
- Maintaining a normal body weight is very important after surgery. Excess body weight will make it more difficult to adjust to wearing the prosthesis.

Medication

- Continue regular medications as prescribed by your surgeon.
- Narcotics are given for immediate postop incisional pain. This pain should decrease within 2 weeks.
- DO NOT drink alcohol or drive while taking narcotic pain medication.
- If you are taking narcotics, you should take some type of laxative to prevent opioid-induced constipation.
- You most likely will be discharged on a blood thinner to prevent clots, aspirin or Lovenox (subcutaneous injection) for 2-4 weeks (no blood tests are necessary). Newer, direct oral anti-coagulation medications may be prescribed, or continued if you came to the hospital already taking these types of medications (Eliquis, Plavix, Pradaxa, Xarelto).
- Previously Coumadin was given. If you are on Coumadin, you will resume this for your anti-coagulation regimen. Blood tests are necessary for Coumadin; the INR range needs to be between 1.5 and 2.0.
- If you are discharged on a blood thinner administered via daily injection, no blood tests are necessary.

Pain

- Patients often experience intermittent, shock-like pains in the area where the leg used to be as if it were still there. Another medication called gabapentin (Neurontin) or Lyrica will be prescribed for these "phantom" pains. The intensity and duration of "phantom" pain varies from one individual to the next, but usually decreases over time.

- Your surgical team understands that you will experience different levels and types of pain following your surgery. You will be prescribed a narcotic, if you wish. Some patients decline a narcotic due to the current opioid crisis and request milder pain medications (tramadol), and/or just take Tylenol alternating with anti-inflammatory medications (Advil, Motrin, Aleve), if tolerated. When we prescribe narcotics, we must do so per current state and federal regulations, which includes a narcotic contract.
- Because of the current focus on opioid addiction, we recommend a multitude of cognitive behavioral techniques, such as mirror therapy, imagery, mindfulness, psychotherapy, deep breathing exercises, virtual reality for distraction, journaling, video games, TENS unit (muscle stimulators that can be used at home) and all other integrative care therapies (physical therapy, acupuncture, chiropractic, massage, lymphedema treatment, reiki).

Common Problems

- It is normal to feel tired after you are discharged.
- If you experience pain and/or swelling, try elevating the site for relief or apply ice – use caution not to leave on more than 20 minutes to prevent frost burn.
- If you develop a firm lump in the incisional area, and your overlying skin looks black and blue, you may have developed a postoperative hematoma (blood collection at the operative site where the mass was removed). Notify your surgeon's office.
- Your leg may seem heavy after surgery. This is due to your muscle weakness. Your strength and ability to control your leg will increase over time.
- You may experience numbness at your incision site. This is normal and usually decreases in time.
- You may experience numbness at the site of your incision. This is normal and usually decreases time.
- For constipation (not being able to move your bowels), drink plenty of water and non-carbonated fluids, and eat foods that are high in fiber (e.g. bran, prunes, fruit, whole wheat breads). There are numerous over-the-counter medications available to help relieve constipation such as Dulcolax, Magnesium Citrate, or Miralax. Ask your local pharmacist to assist you in finding one that is right for you.
- If you smoked cigarettes before the surgery, **DO NOT START SMOKING AGAIN!** Smoking (the nicotine) causes constriction of blood vessels preventing adequate blood flow to the operative area and can delay healing. If you need assistance with this, please contact the MGH Quit Smoking Service at 617-726-7443.

Returning to Work/School

- The length of disability following surgery varies depending on the type of work you do. You may return to school or a sedentary type job much earlier than you would return to a job requiring physical labor.
- You should give yourself **AT LEAST 3-6 months** to recover before thinking about going back to work/school. Everyone responds differently, but most require this time for extensive physical therapy. Then, if you follow the activity guidelines given by your surgeon, you can return to work/school when you feel ready.
- Disability forms will be completed at your preoperative visit or as soon as they arrive at our office. All patient portions of the form **MUST BE** completed and signed by you the patient.
- Handicap placard applications will be completed if necessary. Forms can be obtained by the Registry of Motor Vehicles and then mailed to our office.

Follow-up

- Schedule a follow-up appointment with your surgeon for 2-3 weeks after surgery.
- If you are discharged into a rehabilitation facility, make an appointment to see your surgeon before you are discharged from that facility.
- Schedule a consultation with your prosthetist. We can help you find one in your area.
- Once you complete the initial post-operative visits to check your incision, you will progress to routine oncologic surveillance visits (if the amputation was done for a malignant tumor), which are as follows:

every 3 months (x2 years); every six months (x3 years); followed by annual visits (x5 years) for a total of 10 years of surveillance.

Questions/Concerns

- For any questions, call your surgeon/nurse practitioner.
- Drs. Kevin Raskin, Joseph Schwab, Santiago Lozano-Calderon: 617-724-3700
- Dr. Kyle Eberlin (for specific TMR questions): 617-643-4902
- Doctor of Nursing Practice (DNP) Anne Fiore: 617-724-7630

These instructions are basic post-procedure guidelines. Your surgeon/nurse practitioner may give you more specific instructions. Refer to our website for more information: <http://www.massgeneral.org/orthoncology/education>

A Fiore, DNP (10/2018)