

## Discharge Guidelines

### Upper Extremity Surgeries for Metastatic Tumors of Bone Humerus/Forearm

**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.



1A: Shows a displaced spiral fracture through the distal humeral shaft due to metastatic disease.

1B: Shows an IM Nail to stabilize the fracture and entire Humerus.



2A: Shows a proximal humeral pathologic fracture due to metastatic disease

2B: Shows open reduction and internal fixation of the fracture with instrumentation to align the fractured bone and stabilize the Humerus.

#### Daily Incision Care

- Look at your incision and check for openings, drainage, swelling, redness, changes in color, or bleeding. If you detect any of the above problems, contact your surgeon's office.
- Change your dry dressing every day or leave uncovered if there is no drainage.

- Staples or sutures (unless dissolvable sutures were used) will be removed 3-4 weeks from the date of surgery. They are left in longer if you had radiation or chemotherapy.
- Once the staples/sutures are removed, you can use vitamin E lotion, aloe cream or any moisturizer to massage your incision.
- A visiting nurse may come to your house for a few visits to assist you with your incision care.

### **Activity**

\*These tips are simply guidelines. Your activity level will vary depending on a number of factors including the size and location of your incision, whether you have had chemotherapy or radiation, and whether you have had a muscle flap or skin graft.\*

- You will be discharged wearing an abduction brace for about 6 weeks after surgery. Your shoulder and upper arm must remain at your side for this time frame. You may range your elbow, wrists and fingers.
- Do not lift or carry heavy objects with the involved arm.
- Avoid hot tubs and saunas, especially if you have had radiation therapy. The heat could damage the skin in the treatment area.
- We advise that you not participate in contact sports at any time after your surgery. Choosing to do so would put you at a high risk of wearing out your prosthesis or fracturing your remaining bone. Low impact, non-contact sports are allowed once your bones have sufficiently healed and you receive clearance from your surgeon.
- Return to driving varies by patient. You MUST be off narcotics. It is always best to resume driving after discussion with your surgeon.
- You may return to work or school if you limit activities involving the arm/hand that was operated on.

### **Diet**

- Your appetite may be less than normal after surgery.
- Incorporate proteins and plenty of fluids into your diet, both of which will aid in the healing process.
- If you are taking narcotics, you should take some type of laxative to prevent opioid-induced constipation.
- Adding supplemental drinks (e.g. Ensure, Boost, and Carnation Instant Breakfast) to your diet will be beneficial if you have lost weight due to chemotherapy or radiation.
- Chemotherapy compounded by the effects of surgery may cause some stomach irritation during your recovery period. Take anti-nausea medications as directed by your surgeon or nurse practitioner. Replacing large meals with several smaller meals spread throughout the day may also be helpful.

### **Medication**

- Continue taking your regular medications.
- Due to the nature of the surgery, you will have a heightened risk of infection during your recovery period. Your surgeon will prescribe a three-month supply of oral antibiotics to help your body fight infection.
- If necessary, take prescribed pain medication (narcotics) as directed.
- 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 might be discharged on a blood thinner to prevent clots, usually 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).
- You may be advised to take an aspirin daily to prevent blood clots.

### **Pain**

- 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 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 arm may seem heavy after surgery. This is due to your muscle weakness. Your strength and ability to control your arm will increase over time.
- You may experience numbness at your incision site. This is normal and usually decreases in time.
- If you have had chemotherapy and are experiencing anything unusual that could be a sign of infection such as a high temperature, cough, sore throat, mouth sores, skin rashes, chills or sweating, call your oncologist or nurse practitioner IMMEDIATELY. Chemotherapy can weaken your immune system for a period of time, so any of these symptoms could become dangerous if they are not treated quickly.
- If you have had radiation therapy, the area of skin treated (radiation field) may feel dry, hard and itchy. The skin in this area may also darken and/or peel. These symptoms should lessen within a few weeks of stopping radiation treatments. Do not scrub or use soap on the affected area. Avoid exposing the treated area to direct sunlight. When going outdoors, be sure to use a sunscreen with the highest UV protection. These precautions will help your skin heal more quickly.
- Lymphedema is chronic swelling caused by a build-up of fluid that occurs when the lymphatic system is faulty or damaged. Tumor resection, especially following radiation, can cause lymphedema. Please refer to our patient guide: *Lymphedema – What you Need to Know* ([www.massgeneral.org/ortho-oncology/lymphedema](http://www.massgeneral.org/ortho-oncology/lymphedema)).
- 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.

### **Preventing Infection**

- Prior to any dental work, you must take an antibiotic to protect against infection. We will give you a letter, which can be passed on to other doctors specifying which antibiotics are needed.
- Call your primary care physician if you think you have an infection (sinus, urinary tract, respiratory, cellulitis of the skin) so that he/she can determine whether you need antibiotic treatment. If you have had chemotherapy and suspect an infection, call your oncologist.

### **Metal Detectors**

- Due to current airport security regulations, we no longer provide a letter verifying your metal rod/internal fixation for security clearance.
- Many patients question whether MRI scans are safe with metal rod/internal fixation. The answer is yes; an MRI is safe.

**Follow-up**

- Schedule a follow-up appointment with your surgeon for 2-3 weeks after surgery or sooner, if instructed.
- If you are discharged to a rehabilitation facility, make an appointment to see your surgeon before you are discharged from that facility.
- If chemotherapy or radiation is planned after surgery, you can resume those treatments once we inspect your incision and give clearance.
- Once you complete the initial post-operative visits to check your incision, you will progress to routine oncologic surveillance visits, 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
- 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 info: <http://www.massgeneral.org/orthoncology/education>**

A Fiore, DNP (07/2018)