DR. JAMES LOWE'S POST OPERATIVE LOWER EXTREMITY FREE FLAP WOUND CARE, SPLINT & PIN INSTRUCTIONS

Days 1-7: **The patient will be on bed rest in the Intensive Care Unit the first 2-3 days with strict lower extremity elevation.** Leave the splint or soft dressing in place as instructed by Dr. Lowe. In most cases, the splint or soft dressing will be changed on the fifth day after surgery. Patients may take sponges baths, and it is OK if the splint or dressing gets a little wet but keep as dry as possible for 5 days.

The swelling and discoloration peaks at the third day and usually decreases over the next two weeks. The free flap will usually be carefully monitored with a Doppler device the first several days through a small opening in the splint. The Doppler device should be kept clean bedside with Doppler jelly available at all times. Patients continue strict lower extremity elevation for a week and may transfer to a recliner on the third day after surgery. Patient movement is restricted and should remain in hospital room for 5-7 days. Patient should not transfer without medical staff assistance or supervision.

With permission, the splint will be removed and the wounds cleaned on the day designated by the plastic surgeon. Dr. Lowe or one of his assistance will do the first dressing change. The wound is usually cleaned bedside with soap and water. Dressing supplies should be available bedside the night before each dressing change.

After cleaning the wound, it should be blotted dry and triple antibiotic ointment or Vaseline applied to the flap with a nonstick dressing (Xeroform, Petrolatum Dressing, or Vaseline Gauze). Pin sites can be cleaned with quarter strength peroxide and tap water using a Q-tip once a day once dressing changes start. The first several weeks after surgery a compressive bulky dressing will be applied that will prevent swelling or loss of the flap.

Week 2: **It is essential to continue to elevate and protect the operated extremity.** Keep the flap elevated above the level of the heart as much as possible for the first two weeks and frequently for at least four weeks after surgery. At night place the leg on two pillows and during the day keep the leg elevated while sitting or in bed. Patients are required to use a walker or have an assistant the first week when walking or getting out of bed.

The wound should be covered with a wrap or a removable splint to control swelling. Splints are usually uncomfortable, and may be loosened by cutting sections of the wrap if not tolerable or painful. Notify the physician if pain is severe and not controlled by medications. The flap will be monitored by visual inspection for color change and swelling.

Keep the flap and skin graft site moist with antibiotic ointments to wound unless instructed otherwise and allow the donor site wound to dry. Vaseline can be applied to extremely dry areas sparingly once or twice a week. Wash wounds as instructed and clean any pin sites daily with quarter percent hydrogen peroxide and Q-tips.

You will usually be allowed to dangle the leg for longer intervals on the second week 3 times a day. If the lower extremity free flap tolerates dangling, limited ambulation with a wrap may be allowed. If you have a fracture with pins the surgeon will tell you how much pressure may be applied to the extremity. Patients will usually work with physical therapy to become more mobile and to protect the reconstruction.

Weeks 3-6: **Most patients will be evaluated for transfer to a long term facility or rehabilitation center on the second or third week.** Patients are expected to learn and participate in flap management and protection at the time of transfer. Patients should work with the case manager to evaluate long term needs at home as well. The surgeon will work with staff, patient, and family in preparation for transfer and care. No further surgery should be planned without plastic surgery approval and supervision.

The flap must be carefully protected by medical staff, the patient, and family. As the patient becomes more ambulatory if the flap turns blue, dusky, or swells the extremity should be immediately elevated until improvement noted. Dangling should be limited to 30 minute intervals with at least one hour rest between sessions. The skin graft and flap should not be allowed to dry out and should be kept moist with Vaseline daily.

Daily showers or washing with soap and water is essential for good hygiene and to avoid infection. Lower extremity splinting and compression will be continued with supervision as instructed. Skin graft donor sites are kept dry until fully healed and topical Vaseline can be used for comfort. Patients should receive daily 81 mg aspirin and subcutaneous heparin as needed to prevent clots in the lower extremity.

Months 2-6: **The flap will continue to mature and become more durable**. Stable patients who can care for themselves may be discharged home with home health care if required. The swelling and discoloration will be present for a full 3 months or longer. If the bones are stable the patient will become more active. Most pins will be removed by the eighth week, but the pin care should be continued for at least one week after removal. By 4 months the patient will usually be unrestricted by the plastic surgeon.

Patients should be evaluated by the plastic surgeon for long term care instructions and management. Retained sutures are stapes will usually be removed from the extremity in clinic or at the hospital if indicated. Many patients will require revision surgery or boney work during this time. Again no elective surgery should be performed on the extremity without the plastic & reconstructive surgeon's permission.

The swelling and discoloration around wound should decrease. Medical stockings may help to control the swelling and discomfort in the extremity during this time. Apply Cetaphil, Neutragenia, or other over–the-counter moisturizer to healed wound site and massage the area two times a day. Apply products such as Mederma, Silicone Sheeting, or Silicone Gel to healed scars for the next several months or longer as instructed to decrease scarring. The longer you use these products after surgery, the better the final appearance of your scar.

Months 6-12: **Flaps are usually quite hardy at this time and normal activity can be resumed if bones are fully healed and stable.** The orthopedic surgeon should provide instructions regarding activity as well. Patients should be continued on long term 81 mg aspirin for one year. The scar will be re-evaluated at this time. Usually, scar revisions will not be preformed until six to twelve months after the last surgery, if needed. After the wound and bones have fully healed, the flap may be electively revised or de-bulked for appearance and function. Patients may require long term compression or stockings to avoid chronic swelling.

STRENUOUS ACTIVITY AND HEAVY LIFTING IS TO BE AVOIDED FOR AT LEAST 6 MONTHS. DIRECT SUN CONTACT ON THE SURGICAL SITE IS TO BE AVOIDED FOR 6-12 MONTHS. PLEASE USE A SUN SCREEN – SPF 25 OR GREATER WHEN IN THE SUN.

***Call the office you have any questions or concerns, or if you are having any signs or symptoms of infection (redness, fever, or drainage). (405) 942-4300** JBL