

# Madigan Army Medical Center Referral Guidelines

## Cellulitis or Lower Extremity Infection

### Diagnosis/Definition

- An infected lower extremity is described as any signs or symptoms of infection of the leg, ankle, or foot with or without the presence of a wound.

### Initial Diagnosis and Management

- LPS does not manage simple cellulitis of the lower extremity.
- Consider referral to LPS if the following signs are noted:
  1. Presence of deep space abscess (frank pus from wound; tense, swollen area; flocculence)
  2. Cellulitis is unresponsive to current antibiotic treatment
  3. The patient has a history of:
    - a. amputation (partial foot or partial lower extremity)
    - b. osteomyelitis or exposed bone, ligament, joint structures
    - c. neuromuscular disease processes', autoimmune processes' (rheumatoid arthritis, scleroderma)
  4. Foot deformity noted
  5. Vascular compromise noted (thin shiny skin; edema; varicose veins, etc.)
- Venous stasis wounds should be referred to the OUTPATIENT WOUND CARE CLINIC

### History of Charcot foot (see CHARCOT FOOT REFERRAL GUIDELINE)

**Acute Treatment:** Follow these instructions until the wound is fully healed:

1. Order weight bearing radiographs of both feet and ankles.
2. Obtain culture from depths of wound after cleaning wounds and extremity from toes to knee.
3. **TREATMENT OF WOUNDS ASSOCIATED WITH LOWER LEG EDEMA:**
  - a. Ensure patient follows your instructions for use of diuretics
  - b. Have the patient bathe at night paying special attention to gently cleaning their toes, feet, and legs with soap and water
  - c. Have the patient apply lotion to their feet and legs but NOT between toes
  - d. Have the patient then go straight to bed
  - e. Upon 1st awakening in the morning the patient must apply their compression stockings and get dressed including wearing supportive shoes which should be on all day
  - f. If stockings are "tight", the patient should elevate their legs so that their toes are at eye-ball level for 20 minutes and limit time spent with feet hanging down like when sitting in a chair, eating, or riding in the car
  - g. The role of stockings is to limit swelling NOT squeeze it out so they must be applied upon 1st awakening as above
  - h. Repeat this process daily for life
4. **TREATMENT OF FOOT, ANKLE, AND LEG WOUNDS:**
  - a. Have the patient bathe at night INCLUDING cleansing the sore with soap and water

- b. Have the patient apply a thin layer of the antibiotic cream [Recommend Silvadene Cream or Bactroban Cream] to the sore with a clean Q-tip and cover the sore with a bandaide or light dressing once a day until healed
- c. Have the patient limit their standing and walking to only essentials such as to the bathroom, kitchen, or bedroom until healed
- d. Have the patient elevate their legs so that their toes are at eye-ball level throughout the day and limit time spent with feet hanging down like when sitting in a chair, eating, or riding in car until told to return to normal activities by your doctor
- e. Dispense a surgical shoe with an Orthopedic Work Request card to the Orthotic Lab
- f. Dispense crutches with an Orthopedic Work Request card to the Cast Room.
- g. The patient should be instructed to watch for signs of infection such as redness, increased pain, smelly drainage, and fever and to return or go to the emergency room for evaluation

### **Ongoing Management and Objectives**

- To decrease the rate of lower extremity infections.
- To decrease the rate of toe, foot and lower extremity amputation with prompt referral of active infection with or without ulceration/wounds.
- To manage each patient's condition with a combination of mechanical, medical and surgical therapies tailored specifically for the unique characteristics of the infection being treated.

### **Indications for Specialty Care Referral**

- All patients with lower extremity infections not responding to standard therapy should be referred for evaluation to the Limb Preservation Service/ Wound Care Clinic as an ASAP consult. All patients will require an approved consult to be seen.
- Venous stasis wounds should be referred to the OUTPATIENT WOUND CARE CLINIC

### **Criteria for Return to Primary Care**

- All patients should be followed by the primary care provider for treatment of all co-morbid conditions and routine care with the goal of optimal health and wellness for the whole patient.

### **References**

1. Schade VL, Roukis TS. Use of a Surgical Preparation and Sterile Dressing Change During Office Visit Treatment of Chronic Foot and Ankle Wounds Decreases the Incident of Infection and Treatment Costs. *Foot & Ankle Specialist*. 2008; 1: 147-154.
2. Ayliffe GAJ, Noy MF, Babb JR, et al. A comparison of preoperative bathing with chlorhexidine-detergent and nonmedicated soap in the prevention of wound infection. *J Hosp Infect*. 1983;4:237-244.
3. Kaiser AB, Kernodle DS, Barg NL, et al. Influence of preoperative showers on staphylococcal skin colonization: a comparative trial of antiseptic skin cleansers. *Ann Thorac Surg*. 1988;45:35-38.
4. Albert S. Cost-effective management of recalcitrant diabetic foot ulcerations. *Clin Podiatr Med Surg*. 2002;19:483-491.

5. Apelqvist J, Ragnarson-Tennvall G. Cavity foot ulcers in diabetic patients: a comparative study of cadexomer iodine ointment and standard treatment. An economic analysis alongside a clinical trial. *Acta Derm Venereol.* 1996;76:231-233.
6. Apelqvist J, Ragnarson-Tennvall G, Larsson J. Topical treatment of diabetic foot ulcers: an economic analysis of treatment alternatives and strategies. *Diabet Med.* 1995;12:123-128.

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Referral Guidelines require review every three years.

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