

HHF - PROCEDURE

ORIGINAL DATE: 09/02

REVISED DATE: 06/05

SUBJECT: ELECTRICAL STIMULATION TO FACILITATE WOUND REPAIR

PURPOSE: To facilitate circulation to the wound bed, decrease edema, decrease bioburden in the wound and promote a clean wound bed.

Considerations

Chronic non-healing wounds are often deficient in circulation to facilitate healing, have significant bioburden and/or necrotic tissue. In addition, edema often limits circulation to the wound site. Significant research has been done to support the use of high volt electrical stimulation to promote wound repair. Individuals with chronic, non-healing wounds should be considered candidates for this treatment to facilitate healing if traditional methods of wound care have not produced adequate results. Individuals with chronic, non-healing Stage III and IV wounds due to pressure are candidates for this modality immediately upon wound diagnosis if there are no contraindications to treatment (cancer in the wound, demand pacemaker, pregnancy, stimulation over carotid sinus, osteomyelitis). This type of treatment should be discharged once the goals for healing and/or wound management are met.

Procedure

1. Obtain Physical Therapy orders: PT evaluation and treatment to include electrical stimulation for wound repair.
2. After completing the initial evaluation, write treatment orders to include:
 - a. PT 3-5 x/wk for HVPC E-Stim to (state wound site).
 - b. Pulse rate 50-100 pps, intensity less than 200 volts-submotor threshold, polarity as wound conditions dictate; treatment duration 45-60 minutes.
 - c. Replace dressing after completion of treatment.
3. Prepare wound bed by cleansing as indicated based upon current orders for wound care, using Standard Precautions and clean technique.
4. Pack the wound with gauze that has been soaked in normal saline or use hydrogel impregnated gauze.
5. Place the active electrode over the wound.
6. Place the dispersive electrode proximal to the active electrode (for sacral/coccyx/trunk wounds use the thigh area for dispersive electrode placement).
7. Treat with polarity according to wound conditions.
8. Frequency of treatment is a minimum of 3 times per week and up to 5 times per week.
9. Treatment duration is 45-60 minutes per treatment session.
10. The intensity should be as high as possible from a sensory perception perspective but subthreshold to muscle contraction (voltage ≥ 100 but < 200 volts)
11. The pulse rate should be 80-100 pps.

12. Stimulation is continuous for the entire treatment time.
13. Once treatment is completed, remove electrodes.
14. Discard cloth used with dispersive pad.
15. Discard active electrodes, wiping alligator clips with alcohol and placing in plastic bag. These remain in the patient's home and are discarded after plan of care is completed for electrical stimulation.
16. Observe wound and skin sites and document significant changes.
17. Dress the wound according to MD order.

Approved Policy Committee: 09/13/05