# Wound Care Protocols
## Venous Stasis Ulcers

### Lower Extremity Venous Disease (LEVD) / Venous Insufficiency / Venous Hypertension

***Clinical Description***

**Any ulcer caused by venous insufficiency / venous hypertension in the lower extremities.**

Venous ulcers require both an optimal moist wound healing environment and edema control measures, typically compression**.**

**DETERMINING ARTERIAL PERFUSION IS KEY PRIOR TO APPLYING COMPRESSION. A DUPLEX SCAN IS THE DIAGNOSTIC GOLD STANDARD FOR DETERMINING ARTERIAL FLOW. AT MINIMUM, AN ARTERIAL BRACHIAL INDEX (ABI) SHOULD BE PERFORMED.**

***Wound Description***

| | |
|---|---|
| Location: | Mid –calf to heel, medial, lateral, can be circumferential |
| Demarcation: | Poorly defined, irregular jagged edges |
| Color of Wound Bed: | Ruddy red granulation tissue usually superficial, presence of yellow fibrin |
| Drainage: | Moderate to heavy exudate |
| Edema: | Usually generalized to lower extremity |
| Pulse: | May be difficult to assess secondary to edema |
| Pain: | May be moderately painful, will often improve with decrease in edema |

***Lower Extremity Assessment***

Clinical observations may include firm, leathery (woody) edema (lipodermatosclerosis), reddish brown discoloration (hemosiderosis) and may be associated with varicose, dilated, and/or tortuous veins.

***Formulary Products***

Skintegrity or Micro-Klenz Wound Cleanser
Remedy Hydraguard Skin Cream – Silicone Skin Protectant
Remedy Z-Guard Skin Protectant Paste – Skin Protectant Paste
Oil Emulsion Gauze – Petrolatum Wound Contact Layer
Versatel - Silicone Wound Contact Layer
Derma-Gel - Hydrogel Sheet
Exuderm Hydrocolloid Dressing
Optifoam – Foam Dressing
Maxorb Extra – Alginate Dressing
Optilock – Super Absorbent Dressing
Puracol Plus – Collagen Dressing
Unna-Z – Unna Boot Bandage
Co-Flex – Cohesive Bandage
FourFlex – Multi-Layer Compression Bandage System
Eclypse Boot

### Compression Options

**Option #1 A Zinc, with or without Calamine Compression Paste Boot ("Unna Boot")**

1. Cleanse surface of wound bed with wound cleanser on "stream" setting. Blot any excess cleanser with gauze.
2. Apply Silicone Skin Protectant to entire lower extremity (above toes to below knees) up to wound margins (avoid between toes).
3. Apply Unna Boot. Start just above toes and wrap in small spirals, stopping just below gatch of the knee. Cover with Cohesive Bandage, start just above toes and wrap in a spiral at 50% stretch, at 50% overlap OR if less compression is desired wrap with rolled gauze in a spiral just above the toes to just below the knee gatch.
4. Change at 48 hrs after initial application.
5. Then change Q 5 – 7 days.
6. If no improvement in edema within 10 days notify MD for further evaluation and therapy screening.

**Option #2 A Multi-Layer Compression Bandage System**

1. Cleanse surface of wound bed with wound cleanser on **"stream**" setting. Blot any excess cleanser with gauze.
2. Apply Silicone Skin Protectant or Skin Protectant Paste to entire lower extremity (above toes to below knees) up to wound margins (avoid between toes).
3. Apply oil emulsion gauze or Versatel to all open areas – OR- Exuderm, Derma-Gel, Optifoam, Maxorb Extra or Optilock if indicated to manage drainage.
4. Apply Multi-Layer Compression Bandage System.

    Layer #1 – Padding
    - Apply at a spiral at 50% overlap, begin just above the toes. Do not Stretch.
    - This layer applies padding and provides for absorbency

    Layer #2 – Light Conforming
    - Apply at a spiral at 50% overlap over the first layer
    - Begin just above the toes. Do not stretch.
    - This layer smoothes down the first layer and provides for further absorbency

    Layer #3 – Compression Bandage
    - Apply at a spiral at 50% stretch in a figure of 8, covering layer #2, begin just above the toes

    Layer #4 – Cohesive Bandage
    - Apply at a spiral at 50% overlap and a 50% stretch.
    - Make sure to release several feet of dressing and then roll it back on to itself before wrapping on to the leg.
    - Keep releasing wrap and roll it on to itself until entire leg is wrapped with product.
5. Change at 48 hrs. upon initial application
6. Then change Q 5 – 7 days.
7. If there is no improvement in edema within 10 days consider lymphedema, notify MD for further evaluation and therapy screening.

***Wound Measurement: Length measured head to toe (12 to 6 o'clock, top/bottom). Width measured arm to arm (9 to 3 o'clock, side/side). Length and width measured perpendicular to one another. Depth measured perpendicular to length and width.**

**For additional clinical information, call the Medline Educare Hotline at 1-888-701-SKIN (7546) Monday through Friday 9am to 6pm.**