PURPOSE:
To promote healing of conditions such as venous stasis ulcers or stasis dermatitis by exerting even pressure on the veins of the affected extremity while protecting it from additional trauma.

CONSIDERATIONS:
1. An Unna Boot is a non-elastic zinc paste compression bandage made of weave cloth impregnated with a paste containing 10% zinc. The Unna Boot is designed to augment the calf-muscle pump to reduce venous hypertension and is primarily indicated for patients who are ambulating and less effective for patients who are sedentary.
2. Although the boot is most commonly applied to the leg and foot, Unna paste may be applied to any extremity and wrapped with lightweight gauze.
3. DO NOT wrap bandage using reverse turns, since these areas may exert excessive pressure as the casthardens.
4. Obtain Ankle-Brachial Index (ABI) (See Ankle: Brachial Index (ABI) Measurement) to rule out Ischemic Disease.
5. Assess lower extremity pulses.
6. The Unna Boot is contraindicated if the patient is allergic to any of the ingredients in the paste, i.e., gelatin, zinc oxide or glycerin.
7. The Unna Boot is contraindicated in the presence of unstable heart failure, thrombus and/or arterial insufficiency and poor quality/absent pedal pulses.

EQUIPMENT:
Gloves
Soap and water
Commercially prepared gauze bandage saturated with Unna paste (pink boot will harden, white boot will not harden)
Bandage scissors
Elastic bandage or self adhesive elastic roll (Coban™) to apply over commercially prepared bandage

PROCEDURE:
1. Adhere to Standard Precautions.
2. Explain the procedure to the patient.
3. Assemble the necessary equipment at the bedside.
4. Don clean gloves and cleanse the affected extremity gently, removing any dirt or other material that may cause a pressure point after the boot is applied. Prepare the skin and ulcer as prescribed by the physician.
5. Place patient in supine position with affected leg elevated; position the patient's leg and foot at a 90-degree angle.
6. Using a commercial Unna Boot bandage, apply prepared gauze. Begin to apply bandage at base of toes; wrap twice around toes without using tension.

7. Continue wrapping the patient's leg up to the popliteal space. While applying the wrapping, mold the bandage with the free hand to make it smooth and even. To accommodate the contour of the leg, it may be necessary to “dart/pleat,” or reverse fold the bandage layer, or cut the bandage layer off and start a new turn. Assess if wrap is too tight by inserting one finger between wrap and patient’s skin/popliteal space. Wrap toes to knee with second layer.
8. Cover the Unna Boot with ace wrap or self adhesive elastic roll (Coban™) in a similar fashion utilizing circular wrap with 50% overlap and 50% tension. Begin by anchoring wrap at base of toes.
9. Instruct the patient to remain in bed with his legpositioned and elevated on a pillow until the gauze dries (approximately 30 minutes – for pink boot only).
10. Observe the patient's toes for signs of circulatory impairment including cyanosis, coolness, pain and numbness. Development of any of these problems indicates that the bandage has been wrapped too tightly. If the bandage is too tight, it must be immediately removed. Reapply the boot after consulting with the patient's physician.
11. Schedule a return visit to change the boot weekly, or as ordered, and to assess the underlying skin and healing ulcers. Remove the boot by cutting the dressing with the bandage scissors.
12. Discard soiled supplies in appropriate containers.

AFTER CARE:
1. Document in patient’s record:
   a. Patient’s response to procedure.
   b. Temperature and vital signs per agency policy.
   c. Wound appearance, including size and drainage.
   d. Response of the wound to the prescribed treatment.
2. Instruct the patient/caregiver in care of the Unna Boot and precautions, including:
   a. Signs and symptoms of circulatory impairment and plan for removal if necessary.
   b. Keeping the Unna Boot dry with particular care while bathing (no showers or tub baths).
   c. That the boot will stiffen but will not be as hard as a cast, therefore, the patient must carefully walk on it and handle it to avoid damaging the boot (pink boot).
   d. The frequency of the prescribed dressing change and reassessment of the underlying skin and ulcer.
   e. Diet to promote healing.
   f. May wear cast shoe for ambulation.
   g. Avoid constricting shoe or sock.
REFERENCES:

