

Section: Division of Nursing
Approval: _____

PROCEDURE

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HACKETTSTOWN REGIONAL MEDICAL CENTER

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OR
(Scope)

TITLE: MESHGRAFT DERMATOME II

PURPOSE: To instruct OR personnel (RN & ORT) in the use and operating instructions for the Meshgraft II Tissue Expansion System..

PROCEDURE: 1. Dermacarrier II Skin Graft Carrier

- a) The Meshgraft II System has been preset to mesh skin grafts between .008 and .017 in (0.2mm and 0.4mm).
- b) After the skin grafts have been taken from the donor site, the appropriate expansion ratio applicable to the recipient site is selected. The Dermacarrier II Skin Graft is aseptically removed from its sterile package and placed (grooved side up) on the table. The donor site is then placed on the Dermacarrier II Skin Graft Carrier and evenly spread along its length.

Caution: If the skin is placed on the smooth side of the Dermacarrier II Skin Graft Carrier, the graft will be shredded into long strips and will be unusable.

Note: The skin may be placed on the Dermacarrier II Skin Graft Carrier either dermal or epidermal side up according to MD preference.

- c) The Dermacarrier II Skin Graft Carrier is placed on the guidance plateau grooved side up and pushed against the raised position. The guidance plateau is used to ensure straight entry into the gap between the cutter and the knurled roller.
- d) The leading end of the Dermacarrier II Skin Graft Carrier is firmly introduced between the rollers, making sure the entry is straight, and the entire width of the skin graft is caught between the plastic and rollers. Apply firm pressure to the opposite end of the Dermacarrier II Skin Graft Carrier to assist the cutter in the initial engagement, as the ratchet handle is slowly turned clockwise.
- e) After the Dermacarrier II Skin Graft Carrier has been turned through approximately ½ in. (1.25 cm) stop and check the cut portion of the skin graft. If the graft has not disengaged from the cutter, grasp the leading end of the graft with forceps and disengage the entire meshed portion of the skin from the cutter.
- f) Check the uncut portion of the skin graft. Due to compression between the rollers, the uncut portion must be kept taut at all times when turning the Dermacarrier II Skin Graft Carrier through the instrument.
- g) Apply constant downward pressure on the leading end of the Dermacarrier II Skin Graft Carrier while turning it through the Meshgraft II System. This is done to ensure that the skin graft will not engage in the cutter. The Dermacarrier II Skin Graft Carrier is then turned completely through the instrument.
- h) The instrument must be inspected for proper operation and sterilized prior to use. After each procedure, the Meshgraft II System should be thoroughly rinsed in hot soapy water and wiped dry. Any debris or moisture between the rollers must be removed.

2. Use of the Ratchet Handle

- a) The Meshgraft II System is placed on the table with the extension of the knurled roller facing you.
- b) The ratchet handle is placed on this knurled roller extension with the side having a hole inserted first.
- c) It is then inserted on until the end of the knurled roller extension is flush with the opposite side of the ratchet.
- d) If you have trouble with the insertion, the roller extension end does not conform to the shape of the similarly shaped end of the ratchet. To facilitate this conformation, grasp the knurled roller and keep it stationary, then turn the ratchet handle until the two shapes match and then push the ratchet on completely.
- e) To ensure that the ratchet handle will not come off when the system is being used, take the set screw wrench and turn the set screw down until it is tight against the knurled roller extension.
- f) Once the ratchet is attached the system is ready for use!
- g) For ease of function and best results the ratchet handle should be rotated from the 10 o'clock position clockwise to the 2 o'clock position then returned to the 10 o'clock position by rotating counterclockwise. Repeat this action until the Dermacarrier II Skin Graft Carrier has proceeded completely through the Meshgraft II System.
- h) To clean the ratchet handle, disassemble the instrument in the following manner:
 - 1) Grasp the handle at the knurled end with the slot in the shaft below the ratchet facing you. Take a blunt instrument and insert it in the indentation within the slot and pull downward toward the knurled handle.
 - 2) This will release the ratchet and it should fall out of the assembly. This will expose the next piece to disassemble.
 - 3) Reach into the exposed hole, grasp the pin, and pull it out of the assembly. This completes disassembly and the instrument is ready for cleaning.

Reference: Zimmer Product Information Meshgraft II Tissue Expansion System