

PROCEDURE FOR: Use of Femostop device

**PURPOSE:** To outline method for using the Femostop compression device for external compression of the femoral artery/vein

**POLICY:** Cardiovascular technologists, registered nurses, APRNs and physicians upon completion of demonstrated competence may use the Femostop compression device to achieve hemostasis after removal of femoral arterial and venous intravascular sheaths.

**SUPPORTIVE**

**DATA:** The Femostop device is used for controlled femoral compression after intravascular sheath removal in patients who have had routine diagnostic cardiac catheterizations, balloon angioplasty, intracoronary stent implantation and intra-aortic balloon pump catheters. It is used as a hemostasis device, and sandbag replacement.

**EQUIPMENT:** Femostop compression arch and belt  
Femostop manometer

- PROCEDURE:**
1. Carefully examine the puncture site area prior to sheath removal for any pre-existing hematomas and to assess precisely where the Femostop dome will be positioned.
  2. Note patient's current blood pressure.
  3. Target inflation pressure will be 10-20mm Hg above the systolic pressure or higher if necessary to control bleeding, and until distal pulse is absent (for initial hemostasis).
  4. Patent peripheral IV should be present. Obtain order for Morphine IV, IV fluids and lidocaine locally. Atropine can be used at the physician's discretion.
  5. Place foley catheter if the patient has any difficulty voiding.

Prior to sheath removal-Femostop placement.

1. Test dome and manometer pressure connections.
2. Place the strap under and around the patient's hips so that it is pulled up equally on both sides and is directly in line with the puncture sites. Obese people may need the belt looser and the dome pumped to higher pressure.
3. Remove sterile arch from package being careful to maintain sterility of the dome disc. Rest the dome on the puncture site(s). Withdraw introducer hubs about one inch or just enough to clear the rim of the dome. Find the center circle of the see-through dome. the exact position of this circle

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should be slightly superior (about 1cm) and medial (about 1cm) to the actual puncture sites.

4. Pass the strap through either end of the sidearm locks by fully compressing the lever and adjust to snug but comfortable fit around the patient. The arch should lie straight and squarely across the groin area.
5. Attach male end of the connecting tubing to the arch and; the female end to the manometer. Check connection to insure a tight fit.

Sheath Removal

1. Making certain the control knob of the manometer is closed, (rotated towards you) begin to inflate the dome to 20-30mm and pull the venous sheath. Add extra pressure if needed to control any bleeding.
2. Aspirate sheath for thrombus prior to sheath removal.
3. Proceed to inflate to target pressure (10-20mm Hg above systolic) while simultaneously withdrawing arterial sheath. Emphasis: This should be a synchronous movement. Sheath should be completely removed (somewhere in the range of 60-80mm Hg) before reaching target pressure to allow some slight bleeding at the site and to avoid "milking" of the sheath.
4. Increase pressure as needed to achieve full control of the bleeding.

Hemostasis

1. Initially occlude distal pulses for 5-7 minutes.
2. Adjust the manometer pressure until a good pedal pulse is present, color of the extremity is good, and hemostasis is maintained. This will be the optimum compression pressure.
3. Once hemostasis is achieved, the pressure may be gradually lowered to half of the number and the site observed for two-three minutes.
4. Femostop will be maintained for 6 to 12 hours or as long as ordered by the cardiologist.
5. Remove Femostop and cleanse site and dome with alcohol q 1-2 hours while Femostop is in place as ordered by physician to prevent tissue necrosis. When removing Femostop device after hemostasis has been achieved, position finger above and below dome and gently lift dome off skin surface to avoid disrupting hemostasis. Cleanse site gently to avoid bleeding. After 10 minutes, reapply dome.
6. Carefully loosen the strap on the puncture side of the patient (without totally removing it from the arm) and gently lift the dome off the site. Shift the arch so that it is clear of the

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area. This will allow better visibility of the sites and still provide the control to quickly reposition and recompress the sites if needed.

7. Once total hemostasis has been established, the arch and belt may be completely removed and discarded. Clean the manometer with hospital disinfectant after each use.
8. Dress the wound as usual.

DOCUMENTATION: Record on progress notes as sheath removal per Compressar protocol.

ASSOCIATED

STANDARDS: ICU protocol for care of patient with Femostop  
Cath lab protocol for use of Compressar

CREDENTIALS: CVT, RN, APRN, MD

EFFECTIVE DATE: 9/95

REVISION DATE(S): 3/97, 1/98, 12/00, 10/03, 12/03

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