

PROTOCOL/PROCEDURE FOR: Terumo (TR) Band Radial Artery Compression Device (DRAFT)

PURPOSE: To ensure continuity and patient safety while discontinuing radial artery sheaths with a radial compression device and to assure hemostasis is maintained once the radial sheath is removed.

- POLICY:
1. ONLY Cath Lab personnel can discontinue radial arterial sheaths. Cath Lab, CSDU, ICU and PACU RNs, CVTs or other cath lab personnel involved in direct patient care who demonstrate competency can maintain and remove the TR band according to the procedure outlined below.
 2. Unless otherwise ordered, for diagnostic cases, the TR band should be left on for approximately 2 hours post-procedure; For interventional cases, the TR band should be left on for approximately 4 hours post-procedure, given the additional anticoagulation.

SUPPORTIVE DATA: The Terumo TR Band is a device specifically designed to achieve hemostasis for the transradial approach for cardiac catheterization. It can be used for both right and left radial artery access and comes in 2 sized (Regular and Large).

DESIRED PATIENT

OUTCOMES: 1. The patient will maintain hemostasis following radial artery sheath removal; distal perfusion to the limb will be maintained.

EQUIPMENT: TR Band with inflator syringe
Elastoplast and gauze for pressure dressing
(Personal Protective Equipment is implied.)

PROCEDURE: Action Points of Emphasis

APPLICATION:

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| 1. Place the TR band on the patient's wrist and tighten via the velcro strap. | 1. A small green box indicates where the band should be placed proximal to the percutaneous site. |
| 2. Fill the TR band inflator syringe with 18 ml of air. As the radial sheath is slowly pulled out, inject the 18 mls of air into the one-way valve on the band device, to inflate the balloon overlying the radial artery. | 2. The balloon should initially be inflated to the maximum of 18 mls of air. |
| 3. Once the sheath is completely removed, slowly withdraw air back out via the syringe, 1 ml at a time, observing for blood leaking out from the puncture site. At the point that blood leak is noted, Re-inject 1 ml of air into the balloon. | 3. This ensures that adequate hemostasis is achieved without compromising flow in the radial artery. |

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4. Use a sterile gauze or swab to wipe away any excess flood from underneath the TR band.
5. Assess perfusion (color, temp, sensation in the affected hand).
6. Note the total mls of air instilled and communicate this in hand-off report.
5. Remember to keep the syringe for later deflation.

REMOVAL:

1. When it is time to release the pressure (2-4 hours post procedure, or as ordered), withdraw half the amount of air that was instilled into the balloon, and observe for any bleeding.
2. If bleeding occurs, re-inject air until the bleeding stops and wait another 30 min before repeating the step above.
3. If there is no bleeding, remove all the air in order to deflate the balloon completely and observe for bleeding.
4. If there is no bleeding, remove the TR Band; Cover the site with a sterile gauze and Elastoplast pressure dressing.
4. Elastoplast dressing should be occlusive; It should not encircle the entire wrist.
5. Assess perfusion to the hand (color temp,sensation) with vital signs.
6. Instruct the patient to leave the elastoplast dressing intact until the next morning and to avoid manipulation of the wrist for 24 hours. After the dressing is removed, the site may be gently cleansed with soap & water and a bandaid applied.

REPORTABLE

- CONDITIONS:
1. Notify the MD/ APRN of any uncontrolled bleeding (elevate the arm and apply manual pressure should this occur).
 2. Notify the MD / APRN if circulation to the hand appears compromised.

APPROVAL: Nursing Standards Committee
Cardiac Cath Lab Manager

EFFECTIVE DATE: 10/08