



Rancho Los Amigos National Rehabilitation Center

DEPARTMENT OF NURSING

OPERATING ROOM

POLICY AND PROCEDURE

SUBJECT: PREPARATION, UTILIZATION AND MAINTENANCE
OF THE PNEUMATIC TOURNIQUET

Policy No.: OR69
Supersedes: ALL
Revised Date: 02/2016
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Purpose of Procedure: To ensure appropriate use and care of the pneumatic tourniquet.

Performed By: Physicians, RN

Procedural Steps:

1. Pneumatic tourniquets will be regularly cleaned and tested before use.
KEY POINT: Tourniquet machines will self test when turned "ON".
2. Inspect cuff, tubing, connectors, contact closure and ties for integrity.
KEY POINT: Do not use if all components are not intact.
3. Select proper size i.e., length and width of cuff. Size of cuff should be appropriate to size of extremity.
KEY POINT: Potential for nerve damage is affected by size of cuff, amount of soft tissue between cuff and nerve and the degree and duration of cuff pressure.
4. All tourniquets will be released at 2 hours and every 30 minutes thereafter. Anesthesia personnel will activate the tourniquet at the direction of the surgeon.
KEY POINT: Tourniquet inflation time must be kept to a minimum. The surgeon will be alerted to the duration of tourniquet time periodically.
5. Place webril padding under tourniquet, next to skin.
KEY POINT: Skin under cuff should be protected from mechanical injury by keeping cuff and padding wrinkle free.
6. Position cuff on extremity at the point of maximum circumference of the limb.
KEY POINT: Lower extremity tourniquets should be applied to the proximal third of the thigh, avoiding vulnerable neurovascular structures. Once applied, a cuff should not be rotated to a new position because the shearing forces may damage underlying tissue. The cuff should overlap at least three inches, but not more than six inches
7. Wrap tourniquet cuff with plastic drape before beginning surgical prep. Cover with sterile towel and non-perforating clip after surgical prep.
KEY POINT: Skin prep solutions should not be allowed to collect under the cuff.
8. The tourniquet is cleaned after each use. All disposable items are discarded.
9. Documentation of tourniquet location, pressure and time are maintained by the anesthesia personnel.

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10. Documentation of tourniquet position and skin condition is done in the Perioperative Patient Care Plan.

Revised By: Susie Choi, RN, BSN, CNOR

References:

Guidelines for Perioperative Practice 2015 Edition
Essentials of Perioperative Nursing, Fifth Edition

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04/03 – Revised
06/06 – Reviewed
06/09 – Reviewed
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