

HEMS
PROCEDURES
TOURNIQUET APPLICATION

Initial Date: 5/31/2012
Revised Date: 1/3/2023

Section 7-22

Tourniquet Application

Indications:

1. Life threatening extremity hemorrhage. An amputation with hemorrhage does not necessitate the use of a tourniquet; most bleeding from these injuries is controllable through use of direct pressure and elevation.
2. Amputation with uncontrolled active bleeding.
3. A mass casualty incident may be an indication for the use of tourniquets for temporary control of hemorrhage while the situation is brought under control.


Contraindications:

1. Never use a tourniquet for more than the recommended period of time (product-specific). With any extrication plus transport time of less than 180 minutes, there is minimal risk of developing an ischemic limb.
2. Never apply a tourniquet over an impaled object.

Procedure:

1. If possible, check neurovascular status prior to tourniquet application (pulse, sensation, motor function distal to hemorrhage).
2. Apply tourniquet directly to the skin, proximal to the area of bleeding, at least 2-3 inches (5-8 centimeters) from the wound margins.
 - A. If bleeding is confirmed, but scene is not secure, place the tourniquet high on the affected limb.
 - B. In mass casualty situations, tourniquets may be applied over clothing.
3. Secure the tourniquet in place; continue to tighten the tourniquet until arterial occlusion (bleeding stops).
4. A successfully placed tourniquet may cause significant pain. (Refer to **Pain Management-Procedure Protocol**).
5. Document the time the tourniquet was applied.
6. Note neurovascular status every five minutes post application.
7. Notify the receiving hospital that a tourniquet is in place.
8. Do not adjust or remove a tourniquet once bleeding is controlled.
9. A second tourniquet adjacent to the first may be necessary.

Notes:

1. Tourniquets should not be applied over joints. Application over the peroneal nerve (knee or ankle) or ulnar nerve (the elbow) may result in nerve damage or paralysis.
2. Any limb with an applied tourniquet should be fully exposed and the tourniquet should not be covered with any other bandage.
3. Continued bleeding (other than medullary oozing from fractured bones) distal to the site of the tourniquet is a sign of insufficient pressure and a need to tighten the tourniquet further. A second tourniquet adjacent to the first may be necessary. Refer to **Bleeding Control-Treatment Protocol**.
4.  A clinically indicated and appropriately applied tourniquet should not be loosened once applied. If clinical judgement indicates that the tourniquet is not indicated, is nonfunctional or is not appropriate, contact Medical Control prior to removal or loosening.

Protocol Source/References: <https://books.allogy.com/web/tenant/8/books/b729b76a-1a34-4bf7-b76b-66bb2072b2a7/#ida54cbed-5555-47f0-b791-2c86de208f76>

**HEMS
PROCEDURES
TOURNIQUET APPLICATION**

Initial Date: 5/31/2012
Revised Date: 1/3/2023

Section 7-22

Protocol Source/Reference: Michigan 7.22 Tourniquet Application; Version 5/27/23.