Tourniquet Application

Indications

A. Hemorrhage from extremities refractory to direct pressure, elevation, and splinting and proximal artery compression.
B. Massive and life threatening hemorrhage in a setting where risk of brisk exsanguination makes application of less aggressive methods impractical.

Equipment

A. CAT Tourniquet or SOFT-T tourniquet are the approved devices (per TCCC)
B. If an approved tourniquet is not available, a blood pressure cuff inflated to a pressure sufficient to stop bleeding may be used, though it is not ideal.

Procedure

A. First attempt direct pressure. If a discreet bleeding vessel can be identified, point pressure over the bleeding vessel is more effective than a large bandage and diffuse pressure.
B. If a tourniquet is indicated, apply 2-4 inches proximal to the injury site (or per device instructions) and NEVER across a joint.
C. Be sure to cut away any clothing so that the tourniquet is clearly visible. NEVER obscure a tourniquet with clothing or a bandage.
D. Apply the tourniquet tightly to the limb assuring there is no slack in the device.
E. Tighten windless rod or tensioning device until distal bleeding is stopped. Note: Capillary “oozing” may continue after bleeding is controlled.
F. Secure windless rod in place for positive bleeding control.
G. Document time and location of tourniquet. In addition, mark the time of application on the patient’s skin next to the tourniquet.
H. Reassess every 2-3 min for additional bleeding, tighten or apply a second tourniquet if bleeding is not controlled with the first.
I. Consider analgesia in accordance with Narcotic Administration protocol.

Specific Precautions

A. A tourniquet applied too loosely will only increase blood loss by inhibiting venous return.
B. Applying a tourniquet can cause nerve and tissue damage, whether applied correctly or not. Therefore proper patient selection is of the utmost importance.
C. Injury due to tourniquet placement is unlikely if removed within 1 hour. In cases of life threatening bleeding, benefit outweighs theoretical risk.