

Tourniquet Application

Procedure

Douglas County KS EMS System

March 2022

Approved Provider: EMR, EMT, AEMT, Paramedic

Reference Protocols: [General Trauma](#), [Hemorrhage Control](#)

Indications

- Life threatening extremity hemorrhage.
- A mass causality incident may be an indication for the use of tourniquets for temporary control of hemorrhage while the situation is brought under control

Contraindications

- Application of tourniquet over an impaled object

Precautions

- Tourniquet should not be loosened once applied for any reason
- Applied "High and tight" never over injury or joint

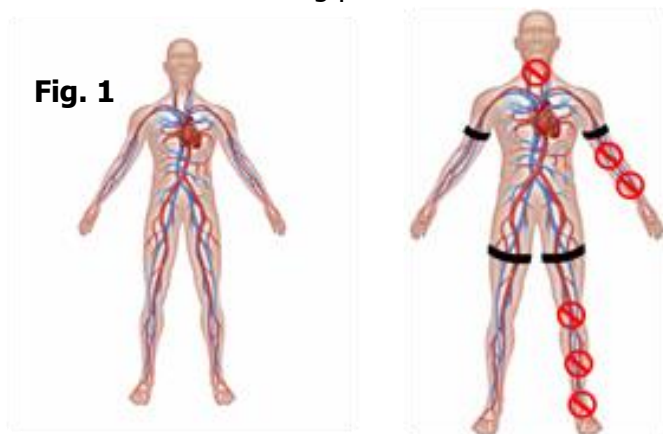
Procedure (Fig. 1 & 2)

- Check neurovascular status prior to tourniquet application if time permits
 - Pulse, Sensation, motor function distal to hemorrhage)
- Apply tourniquet as high as possible proximal to the area of bleeding, at least 3-5 centimeters from the wound **"high and tight"** (Fig. 1)
- Secure the tourniquet in place; continue to tighten the tourniquet until hemorrhage is controlled. Use the minimal effective pressure required to reliably maintain arterial occlusion throughout the procedure.
- Elevate the extremity if possible
- Note the time the tourniquet was applied; and if possible write time on tourniquet or extremity. Reassess neurovascular status every five minutes post application

Special Consideration

- Tourniquet should be placed as high as possible and should not be applied over joints. Application of the tourniquet over the peroneal nerve (Knee or ankle) or the ulnar nerve (the elbow) may result in nerve damage or paralysis
- Tourniquets should not be applied over clothing if possible
- Continued bleeding distal to the site of the tourniquet is a sign of insufficient pressure and a need to tighten the tourniquet or apply second tourniquet distal to the first.
- A tourniquet should not be loosened in any patient with obvious signs of shock or amputation that necessitated use of the device.
- Consider administering pain medication

Fig. 1



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Combat Application Tourniquet®

Instructions for Use: Two-handed Application

To prepare for use, store the C-A-T® in its one-handed configuration



Apply tourniquet proximal to the bleeding site. Route the band around the limb and pass the tip through the inside slit of the buckle. Pull the band tight.



Pass the tip through the outside slit of the buckle. The friction buckle will lock the band in place.



Pull the band very tight and securely fasten the band back on itself.



Twist the rod **until bright red bleeding has stopped and the distal pulse is eliminated.**



Place the rod inside the clip; locking it in place. **Check for bleeding and distal pulse.** If bleeding is not controlled, consider additional tightening or applying a second tourniquet proximal side by side to the first and reassess.



Secure the rod inside the clip with the strap. **Prepare the patient for transport and reassess.** Record the time of application.