



**REGION 11
CHICAGO EMS SYSTEM
PROCEDURE**

Title: Hemorrhage Control

Section: Trauma Management

Approved: EMS Medical Directors Consortium

EMS Level: BLS/ALS

HEMORRHAGE CONTROL

INDICATIONS

- External hemorrhage

CONTRAINDICATIONS

- None

EQUIPMENT

- Pressure Dressing: Emergency Trauma Dressing (ETD) or Emergency (Israeli) Bandage
- CAT (Combat Application Tourniquet)
- Hemostatic gauze

PROCEDURE

1. Apply personal protective equipment: gloves.
2. Apply direct pressure with gloved hand to bleeding site.
3. **For extremity trauma, apply pressure dressing** (ETD or Israeli Bandage).
4. Place sterile non-adherent pad over wound and wrap bandage around limb.
5. For **ETD**: Pull the pressure dressing tight and wrap to cover the pad area by beginning on the edge farthest from the torso. For additional pressure, twist bandage so the twisted portion of the bandage is over the pad, wrap around the limb, twist back, and finish the wrap. Secure the bandage with Velcro fastener.
6. For **Israeli Bandage**: When the bandage reaches the pressure bar, insert the fabric into the pressure bar and reverse the direction of the wrap. Wrap the bandage to cover the edges of the pressure bar. Secure the bandage by hooking the ends of the closure bar into the fabric.
7. Reassess patient for hemorrhage control.
8. **For extremity injury amenable to tourniquet placement**, if direct pressure or pressure dressing is ineffective or impractical, apply tourniquet.
9. Route the band around the limb, pass the tip through the slit of the buckle.
10. Place the tourniquet 2-3 inches proximal to wound (not over the joint) directly to the skin.
11. Pull band tightly and fasten it back on itself all the way around the limb but not over the rod clips.



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12. Tighten band so the tips of three fingers cannot be slide between the band and limb, otherwise re-tighten and re-secure.
13. Twist the rod until the bleeding has stopped.
14. Secure the rod inside a clip and lock it into place.
15. Check for bleeding and distal pulse.
16. If bleeding not controlled or distal pulse is present, tighten the tourniquet.
17. If bleeding still not controlled, place a second CAT above and side by side to the first.
18. Route the band between the clips and over the rod.
19. Secure the rod and band with time stamp.
20. Record time of application.
21. **For junctional (groin or axillary) injury not amendable to tourniquet placement**, if direct pressure/pressure dressing is ineffective or impractical, apply hemostatic gauze.
22. Pack wound tightly with hemostatic gauze (or plain gauze if not available), and apply direct pressure.
23. Reassess the patient and evaluate frequently for bleeding.
24. Pain assessment and management as indicated.
25. Inform subsequent providers regarding interventions performed.

Prehospital External Hemorrhage Control Protocol

