Title: Hemorrhage Control  
Section: Trauma Management  
Approved: EMS Medical Directors Consortium  
Skill Level: BLS/ALS

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date:</th>
<th>Resource Hospital:</th>
<th>Training Site:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluator:</td>
<td>Signature:</td>
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<td></td>
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</tbody>
</table>

**Actual Time Started:**

<table>
<thead>
<tr>
<th>Selects, checks, and assembles equipment</th>
<th>Points Possible</th>
<th>Points Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Dressing – Emergency Trauma Dressing (ETD)</td>
<td>1</td>
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<tr>
<td>Pressure Dressing – Emergency (Israeli) Bandage</td>
<td>1</td>
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<tr>
<td>CAT (Combat Application Tourniquet)</td>
<td>1</td>
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<tr>
<td>Hemostatic Gauze</td>
<td>1</td>
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**States Indications for Procedure**

External hemorrhage | 1

**States Contraindications for Procedure**

None | 1

**Performs Procedure**

- Applies PPE: gloves | 1
- Apply direct pressure with gloved hand to bleeding site | 1

**Pressure Dressing (ETD or Israeli Bandage)**

- Place sterile non-adherent pad over wound and wrap bandage around limb | 1
  - 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. | 1
  - 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. | 1
- Reassess patient for hemorrhage control | 1

**CAT (Combat Application Tourniquet)**

For extremity injury amendable to tourniquet placement, if direct pressure/pressure dressing is ineffective or impractical, apply tourniquet | 1

- Route the band around the limb, pass the tip through the slit of the buckle | 1
- Place tourniquet 2-3 inches proximal to wound (not over joint) directly to skin | 1
- Pull band tightly and fasten it back on itself all the way around the limb, but not over the rod clips | 1
- Tighten band so the tips of three fingers cannot be slid between band and limb, otherwise re-tighten and re-secure | 1
- Twist the rod until the bleeding has stopped | 1
- Secure the rod inside a clip and lock it into place | 1
- Check for bleeding and distal pulse | 1
| If bleeding not controlled or distal pulse is present, tighten tourniquet  | 1 |
| If bleeding not controlled, place second CAT above and side by side to first | 1 |
| Route the band between the clips and over the rod | 1 |
| Secure rod and band with time strap | 1 |
| Record time of application | 1 |

**Hemostatic Gauze**

| For junctional (groin or axillary) injury not amendable to tourniquet placement, if direct pressure/pressure dressing is ineffective or impractical, apply hemostatic gauze | 1 |
| Pack wound tightly with hemostatic gauze (or plain gauze if not available) and apply direct pressure | 1 |

**Reassessment**

| Evaluate frequently for bleeding | 1 |
| Pain assessment and management as indicated | 1 |
| Inform subsequent providers regarding interventions performed | 1 |

Actual Time Ended: _______________

Critical Criteria:

- Failure to take or verbalize personal protective equipment
- Failure to apply hemorrhage control techniques in stepwise manner
- Failure to control hemorrhage
- Failure to manage the patient as a minimally competent EMT or Paramedic
- Exhibits inappropriate affect with patient or other personnel
- Uses or orders a dangerous or inappropriate intervention
- Failure to achieve a score of 23 or greater

☐ Successful ☐ Unsuccessful

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**Prehospital External Hemorrhage Control Protocol**

1. Apply direct pressure/pressure dressing to injury

2. **Direct pressure effective** (hemorrhage controlled)
   - Apply tourniquet
   - Apply topical hemostatic agent with direct pressure

3. **Direct pressure ineffective or impractical** (hemorrhage not controlled)
   - Wound amenable to tourniquet placement (e.g. extremity injury)
   - Wound not amenable to tourniquet placement (e.g. junctional injury)