

# ADULT MUSCULOSKELETAL TRAUMA

## EXTREMITY TRAUMA

HPI	Signs & Symptoms	Differential Diagnosis
<ul style="list-style-type: none"> <li>• MOI consistent with extremity injury</li> <li>• Pain scale</li> <li>• Time of injury</li> <li>• Anticoagulant use</li> <li>• Age</li> </ul>	<ul style="list-style-type: none"> <li>• Deformity, instability</li> <li>• shortening, lengthening</li> <li>• New onset PMS changes</li> </ul>	<ul style="list-style-type: none"> <li>• Crush injury/syndrome</li> <li>• Hypovolemic shock</li> </ul>

	EMR	EMT	PM
1. Provide Adult Routine Trauma Care - treat life threatening problems with airway, breathing circulation and disability.	•	•	•
2. Obtain ECG and/or 12 lead, monitor Capnography.		•	•
3. Evaluate for deformity, shortening, rotation, instability	•	•	•
4. Evaluate the neurologic status of extremity (sensation and movement)	•	•	•
5. Evaluate the vascular status of extremity (pulse, pallor, cap. refill, degree of blood loss)	•	•	•
6. Manage life-threatening external bleeding:  Expose the wound and apply direct pressure to bleeding site, followed by a pressure dressing  If direct pressure/pressure dressing is ineffective or impractical, apply a commercial <a href="#">tourniquet</a> to extremity  Junctional injury or any limb wound with persistent bleeding, wound pack tightly to the depth of the wound until bleeding stops. Then apply direct pressure (≥ 3 min.) and/or pressure dressing	•	•	•
7. Manage life-threatening internal bleeding:  Stabilize suspected fractures/dislocations	•	•	•
8. For <a href="#">Pain Management</a> : <a href="#">FENTANYL</a> : 1 mcg/kg IVP/IN/IO/IM, max single dose 100 mcg, repeat every 10 min., max total dose 200 mcg			•

**UNSTABLE:** SBP < 90, (< 110 patients ≥ 65), tachycardia > 120 BPM

9. <b>NORMAL SALINE</b> in 500 mL increments, titrate to MAP 65 or SBP 90 (SBP 110 for ≥ 65 years)	•
10. Contact <b>OLMC</b> :  <a href="#">TRANEXAMIC ACID</a> (TXA): 1g diluted in 100mL D5W IVPB, over 10 min.	•

### PEARLS:

1. Survival is markedly improved when a tourniquet is placed before shock develops
2. Properly-applied tourniquets in conscious patients are painful – treat pain with analgesics, but do not loosen a tourniquet to relieve discomfort
3. [Amputated](#) body parts should be transported with patient for possible re-implantation