## *Soft Tissue & Orthopedic Injuries*

1. Follow **General Pre-hospital Care Protocol**.
2. Pediatric patients (≤ 14 years of age) utilize MI MEDIC cards for appropriate medication dosage. When unavailable utilize pediatric dosing listed within protocol.
3. Control bleeding (refer to **Bleeding Control (BCON)- Procedure Protocol**)
    A. Utilize direct pressure.
    B. Consider early tourniquet use (refer to **Tourniquet Application-Procedure Protocol**).
    C. Consider MCA approved hemostatic agents and hemorrhage control devices.
    D. Consider use of pressure dressings with deep wound packing.
    E. Consider pelvic binding for suspected unstable pelvic fracture.
4. For uncontrolled bleeding with hemorrhagic shock see **Hemorrhagic Shock-Treatment Protocol**
5. If appropriate, maintain spinal precautions for patient per **Spinal Injury Assessment-Treatment Protocol.**
6. Assess pain on 1-10 scale and treat per **Pain Management-Procedure Protocol**.
7. Immobilize/splint orthopedic injuries as appropriate.
    A. Special Considerations
        i. Consider traction splinting for closed femur fractures (excluding hip/femoral neck).
        ii. Straighten severely angulated fractures if distal extremity has signs of decreased perfusion.
        iii. Evaluate and document neurovascular status before and after splinting.
8. Partial/complete amputations, major soft tissue injuries (e.g., mangled extremity) and open fractures.
    A. Control bleeding as above
    B. Cover wounds with sterile dressings moistened with sterile solution.
    C. Splint extremity.
    D. Recoverable amputated parts should be brought to hospital as soon as possible.
    E. Wrap amputated part in sterile dressing moistened with sterile solution. Seal in a plastic bag and, if available, place bag in container of ice and water. DO NOT place part directly on ice.
    S F. Obtain IV access per **Vascular Access and IV Therapy-Procedure Protocol.**
    G. Administer antibiotics (per MCA selection).

MCA Selection for Antibiotics

☐ No antibiotic selection

☑ **Ceftriaxone Slow IV Push**: 2gm diluted with 20ml **NS**
1. Adult: 2 gm (diluted) slow IVP 3-5 min
2. Pediatrics > 2 months of age:
   a. Administer diluted dose according to MI MEDIC cards.
   b. If MI MEDIC cards are not available, administer 50 mg/kg (diluted) slow IVP 3-5 min (Maximum dose 2 gm)

☑ **Ceftriaxone Infusion:** Diluted dose added to 100 mL NS bag
1. Adult: 2 gm (diluted) added to 100 mL NS bag. Infuse over 15-30 min
2. Pediatrics ≥ 7 years of age:
   a. Ceftriaxone Infusion according to MI MEDIC cards
   b. If MI MEDIC cards are not available, add 50 mg/kg (diluted) to 100 mL NS bag. Max dose 2 gm. Infuse over 15-30

☐ **Cefazolin Slow IV Push:** 2 gm diluted with 20 ml or **NS**,
1. Adults: 2 gm (diluted) slow IVP 3-5 min
2. Pediatrics:
   a. Administer diluted dose according to MI MEDIC cards.
   b. If MI MEDIC cards are not available, administer 30 mg/kg (diluted) slow IVP 3-5 min (Maximum dose 2 gm)

☐ **Cefazolin Infusion**. Diluted dose added to 100 mL NS bag
1. Adult: 2 gm (diluted), added to 100 mL bag of NS. Infuse over 15-30 minutes.
2. Pediatrics ≥ 7 years of age:
   a. Cefazolin Infusion according to MI MEDIC cards.
   b. If MI MEDIC cards are not available, add 30 mg/kg (diluted) to 100 mL NS bag. Max dose 2 gm. Infuse over 15- 30 minutes.

H. Frequent monitoring of circulation, sensation, and motion distal to the injury during transport.

9. For severe crush injuries, refer to **General Crush Injury-Treatment Protocol**.
10. Impaled objects are left in place and stabilized. Removal of impaled objects is only with approval of Medical Control.
11. Follow MCA transport protocol.
12. Provide pain management per **Pain Management-Procedure Protocol.**

Medication Protocols
Cefazolin
Ceftriaxone