# SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

## Effective: 01/01/11 Supersedes: 09/01/06

#### Protocol: P-049

# **PEDIATRIC TRAUMA**

#### **INFORMATION REQUIRED**

- Mechanism of injury.
- History of event.
- Weight: recording of weight or per "length based" tape (preferred).

#### **OBJECTIVE FINDINGS**

- Pediatric Assessment Triangle:
  - Appearance;
  - Circulation to the skin; capillary refill, central and peripheral pulses, skin color;
  - Work of Breathing; nasal flaring, retractions, grunting, stridor, position.
- Physical signs of trauma.
- Assess airway.
- Assess mental status with AVPU.

BLS Treatment	ALS Treatment
<ul> <li>Ensure ABC's.</li> <li>High flow oxygen, assist ventilation prn.</li> <li>Control external bleeding with direct pressure.</li> <li>Keep child warm and provide reassurance.</li> <li>Spinal immobilization.</li> <li>For head trauma, elevate head of spine board 15-20 degrees.</li> <li>If avulsed tooth, transport tooth in saline soaked gauze.</li> <li>Routine Medical Care.</li> </ul>	<ul> <li>Manage airway according to the Airway Management Protocol (P-004).</li> <li>2 large bore IVs or IOs of NS as indicated en route to hospital.</li> <li>If signs of shock, give fluid challenge 20 ml/kg and consider 2nd bolus 20 ml/kg (enroute) to titrate SBP to 60 for penetrating trauma and 90 for blunt trauma.</li> <li>For isolated extremity trauma, consider pain treatment with <b>Morphine sulfate</b>:         <ul> <li>&lt; 6 months of age: 0.05 mg/kg slow IVP</li> <li>&gt; 6 months of age: 0.1 mg/kg slow IVP</li> <li>May repeat q 5 minutes at half the initial dose prn.</li> </ul> </li> </ul>
	<ul> <li>Consider Ondansetron for nausea and vomiting. For children ages 4 up to an including age 8, use 4 mg IV/IM. For children over age 8, use 4 mg IV/IM and this dose may be repeated q 20" to a maximum total dose of 12 mg.</li> </ul>

### DOCUMENTATION

C-spine assessment/precautions if indicated. Perfusion assessment: If inadequate, IV or IO of NS started. Pain assessment: Appropriate use of **Morphine sulfate.** 

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### PRECAUTIONS AND COMMENTS

- Use "length based" resuscitation tape to estimate child's weight in order to calculate fluid boluses.
- Suspect child maltreatment when physical findings are inconsistent with the history.
- Remember reporting requirements for suspected child maltreatment (see Abuse/Assault protocol).
- Initiate pain control measures early after patient assessment.
- Pediatric patients meeting trauma center criteria go to the trauma center; all others may go to designated receiving hospitals.
- In the setting of a motor vehicle collision with a pediatric patient who is properly secured in a car seat, if the seat is not damaged and the patient is not in distress, transport the patient in the car seat.
- Do not use **Ondansetron** in children under age 4.