05-0813 – Pediatric Trauma Care

Authority: Health and Safety Code Division 2.5, California Code of Regulations, Title 22, Division 9

Policy

ALS providers should by-pass facilities not identified by Nor-Cal EMS as an appropriate destination, even if they are the closest to the incident. The destination decision based on the following:

1. The ALS Trauma Triage Decision Scheme policy located in the ALS protocols.
2. Time Zones – to determine whether a patient is within any of the time zones listed below, the destination decision must be determined on a patient specific basis. It considers ground transport time, air transport time (including response time if the helicopter is not on-scene), weather, traffic considerations, and other factors which may affect total transport time.
   a. Within twenty (20) minutes of a Level II Trauma Center:
      i. When a patient meets criteria in any of the following Trauma Triage categories, they should be taken directly to the Level II Trauma Center: Anatomical Factors, Physiologic Factors or Mechanism of Injury AND Co-Morbid Factors combined.
      ii. When a patient meets ONLY Mechanism of Injury OR ONLY Co-Morbid Factors, the Base Hospital should be contacted with patient report and a destination decision made at that time.
   b. Between twenty (20) – sixty (60) minutes from a Level I or Level II Trauma Center: When a patient meets ANY of the Trauma Triage Criteria, patient destination is a base hospital decision. Consideration should be given to the extra transport time to a Level I or Level II Trauma Center versus transport to a closer, lower level trauma center.
   c. Greater than sixty (60) minutes from a Level I or Level II Trauma Center: When a patient meets ANY of the Trauma Triage Criteria, the patient should be transported to the nearest Level III or Level IV Trauma Center.

Patient Destination Exceptions

1. A trauma patient may be taken to the closest available appropriate medical facility when the patient has a life threatening condition, which overrides the need for expedient surgery. This would include conditions such as an unmanageable airway and/or uncontrollable hemorrhage, which cannot be relieved or stabilized in the field.
2. Diversion (All levels of trauma centers) - When a trauma center is on diversion and not able to respond to trauma activation (i.e., lack of CT, lack of a surgical coverage), notifications will be made according to the Hospital Diversion policy. Patients meeting trauma triage criteria will be diverted to the nearest trauma center as directed, until trauma center requirements are restored.
3. Patients whose primary injuries are burns may, at the option of the base hospital physician, be transported directly to a burn center, refer to ALS Protocol Module Policy #809 for burn patient criteria.

Load and Go Criteria

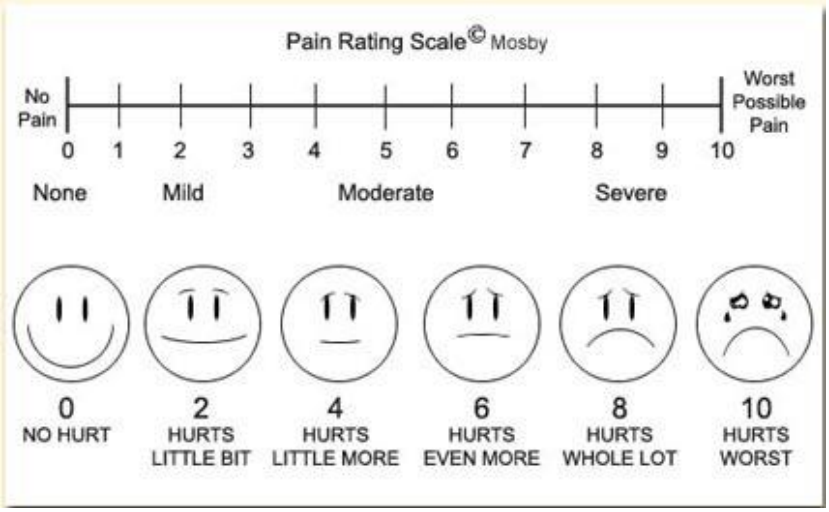
Trauma patients meeting triage criteria should be transported as soon as possible with the recommended on-scene time being ten (10) minutes. Procedures at the scene should be limited to triage, patient assessment, airway management, control of external hemorrhage, and appropriate immobilization. ALS interventions should be completed en route to a trauma center with the exception of those incidents requiring prolonged extrication.

BLS

1. Ensure scene safety. Perform a scene survey to assess environmental conditions and mechanism of injury that can affect patient care.
2. Observe universal precautions.
3. Establish responsiveness and perform neurologic examination.
4. Airway (Note: the nasopharyngeal airway is contraindicated in the presence of facial trauma).
   a. Be prepared to suction blood, secretions or emesis.
5. Breathing
   a. Give supplemental oxygen and assist ventilations as needed.
6. Circulation/perfusion
   a. Assess heart rate, skin color/temperature, and the quality of central and peripheral pulses.
   b. Control obvious bleeding.

   c. Treat sucking chest wound by applying occlusive dressing secured on three sides.
   d. Treat flail chest by stabilizing with gentle pressure and consider positive pressure ventilation for severe respiratory distress.
7. Disability, (neurologic evaluation)
   a. Initiate full spinal precautions
   b. Assess baseline Glasgow Coma Scale.
   c. Assess pain.
8. Expose and examine. Keep patient warm.
9. Full set of vital signs and repeat vital signs as indicated.
10. Give nothing by mouth, provide comfort measures;
11. Secondary examination, head to toe or toe to head.
12. Immobilize suspected fractures.
   a. Immobilize the joint above and below the injured site.
   b. Remove jewelry or constricting bands.
   c. Assess distal circulation, sensitivity and motor function before and after splinting.
   d. Elevate and apply ice pack(s)
13. Stabilize and leave impaled objects in place; remove only if the object interferes with breathing or per Base Hospital Physician Order.

ALS

1. Establish IV/IO, Normal Saline:
   a. If signs and/or symptoms of shock: establish two large bore NS IV/IO (warmed), administer IV bolus (10 ml/kg neonate OR 20 ml/kg greater than 5 kg); may repeat twice to maintain blood pressure greater than [70 + (2 X age)], then per Base Hospital Order.
   b. Do not delay transport to establish IV/IO access.
2. Cardiac monitor, treat arrhythmias per Pediatric Dysrhythmia protocol.

Category	Infant GCS		Peds GCS	
Eye Opening	Spontaneous To voice To pain only None	4 3 2 1	Spontaneous To voice To pain only None	4 3 2 1
Verbal Response	Coos and babbles Irritable cries Cries to pain Moans to pain None	5 4 3 2 1	Oriented, appropriate Confused Inappropriate words Incomprehensible words/sounds None	5 4 3 2 1
Motor Response	Moves spontaneously and purposefully Withdraws to touch Withdraws to pain Abnormal flexion Abnormal extension None	6 5 4 3 2 1	Obeys commands Localizes pain Withdraws to pain Flexion to pain Extension to pain None	6 5 4 3 2 1