Regional Pediatric Trauma Transfer and Management

Major trauma patients should be transferred within 2 hours of injury.
All other trauma patients needing transfer should ideally occur within 4 hours of injury.

Optimal care of pediatric trauma patients may require transfer to a Level 1 Pediatric Trauma Center.

Immediate Transfer Criteria

(Any one of these, transfer to pediatric trauma center. Call for transfer should be made once criteria is met. Continue resuscitation until transfer team arrives.)

Physiologic Criteria:

1. Depressed or altered mental status (GCS ≤14)
2. Respiratory distress/failure OR Requiring intubation
3. Pediatric/Teen Shock, uncompensated or compensated:
   - 0-6 mo: SBP <60 mmHg HR <60 or >160
   - 7mo-5yr: SBP <70 mmHg HR <60 or >140
   - 6-12 yr: SBP <70+(2 x age) HR <60 or >120
   - 13yr-17 SBP <90 HR <60 or >120
4. Requiring any blood transfusion

Anatomic Criteria:

1. Penetrating injury to head, neck, chest, abdomen or pelvis, including groin
2. Injury to multiple body regions
3. Fractures and deep penetrating wounds to an extremity complicated by neurovascular or compartment injury
4. Open fractures, fracture of two or more major long bones, pelvic fractures, or fracture of the axial skeleton
5. Spinal cord or column injuries
6. Traumatic amputation of an extremity or crushed, degloved, or mangled extremity
7. Head injury when accompanied by intracranial hemorrhage, CSF leaks, or open or depressed fractures
8. Significant blunt injury to the chest, abdomen or neck (including hanging, drowning, or clothesline MOI's)

Other Criteria:

1. Patients 0-17 requiring ICU or admission for traumatic injuries
2. Clinical suspicion for Child Maltreatment with "Red Flag Injuries" (See Chart)
3. Any child who may benefit from consultation with, or transfer to, a Pediatric Trauma Center or requires pediatric sub-specialty services.

***Burns: Consider direct transfer to a burn center**

References: ATLS, ACS, CDC, ABS, APSA, PALS

Primary Management

Airway/ C-spine;

- Protect and secure airway (post intubation CXR)
- Immobilize c-spine with appropriately sized collar and remove backboard as soon as possible

Breathing:

- Chest tube (if needed)

Circulation:

- Start compressions if there is no palpable femoral, brachial, or carotid pulse OR HR <60 in infants
- **Tachycardia and decreased perfusion are early signs of compensated shock. Change in BP is a late sign**
- Hemorrhage: consider tourniquet early (CAT tourniquets may not control bleeding in small children)
- eFAST (if available)
- Fluid Resuscitation: 2 x 20ml/kg crystalloid bolus, then 10 ml/kg PRBC

Disability:

- Evaluation of neurologic status using pediatric GCS

Radiology:

- **DO NOT CT if injuries meet transfer criteria, unless advised by transferring facility**
- **DO NOT PERFORM BABYGRAM OR SKELETAL SURVEY for suspected child abuse**

Secondary Management

Focused Assessment:

- OG tube if intubated
- Neuro Exam
- Provide warming measures
- Document all skin findings
- For any suspected child abuse, notify CPS and law enforcement

*Check for hypoglycemia; infants have decreased glucose stores
**Spleen injuries do not require operative intervention, unless hemodynamically unstable after fluid AND blood administration.

Contact Info

For questions or transfer to the Level I Pediatric Trauma Center, please call the PCL at 704-512-7878/ 877-492-9680

Atrium Health
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