PO80 PEDIATRIC TRAUMA CONSIDERATIONS (AGE < 12 YEARS)

Spinal Immobilization

A. Context/Special Considerations:
B. 60-80% of spine injuries in children occur at the cervical level
C. Children < 8 age year are more likely to sustain high C1-C3 injuries
D. Less force is required to injure the cervical spine in children than adults
E. Children with Down Syndrome are at risk for cervical spine injury
F. **Avoid strapping abdomen- children are abdominal breathers**
G. Use age/size appropriate immobilization devices
H. Proper immobilization of pediatric patients should **prevent**:
    1. Flexion/extension, rotation, lateral bending or axial loading of the neck (car seats do not prevent axial loading and are not considered proper immobilization technique)
    2. Non-neutral alignment or alteration in normal curves of the spine for age (consider the large occiput)
    3. Twisting, sliding or bending of the body during transport or care

Spinal Immobilization criteria:

A. Be conservative. Children are difficult to assess and "clinical clearance" criteria are not well established, as in adults
B. Immobilize the following patients as well as any child you suspect clinically may have a spine injury:
    1. Altered Mental Status (GCS < 15, AVPU < A, or intoxication)
    2. Focal neurologic findings (paresthesias, loss of sensation, weakness)
    3. Non-ambulatory patient
    4. Any complaint of neck pain
    5. Torticollis (limited range of motion, difficulty moving neck in history or physical)
    6. Substantial torso Injury (thorax, abdomen, pelvis)
    7. High Risk MVC (head on collision, rollover, ejected from the vehicle, death in the same crash, or speed > 55 m/h)
    8. Diving accident