Southern Illinois Regional EMS System

DD-3 HEAD INJURIES

BLS/ILS/ALS

Management:

- Patient Assessment and Initial Care protocol
- All patients with traumatic head injuries must be assumed to have a cervical spine injury.
    - Immobilization is mandatory.
- Oxygen therapy as appropriate
    - 1-6 LPM by cannula: minimal distress.
    - 12-15 LPM by NRB mask: moderate/severe distress with signs of hypoxia.
    - 15 LPM by BVM: inadequate rate/effort, severe distress, unstable.
        - DO NOT over-ventilate
    - Maintain SpO2 > 94%
- Control any major bleeding.
    - Do not apply direct pressure to open or depressed skull fractures.
- (ILS/ALS) Establish vascular access with 0.9% NS at TKO rate.
- Neurological Examination:
    - Mental status including GCS.
    - Pupils: shape, size, reactivity, equality.
    - Visual or hearing changes / losses.
    - Vital signs including: BP, pulse pressure, pulse, respiratory rate/depth/pattern.
    - Motor and sensory function/deficit.
- Be prepared for the possibility of vomiting and/or seizure activity.
- Contact Medical Control

Increased Intracranial Pressure:

- Increased SBP, severe headache, abnormal respiratory patterns, vomiting, altered LOC, and/or abnormal motor/sensory/pupil exams.
    - Maintain supine position with head in axial alignment.
    - Monitor SpO2
    - Oxygen administration: 12-15 LPM by NRB mask.
    - If necessary, ventilate with BVM 100% O2 at 10-12 BPM.
    - Watch for signs of cerebral herniation.
        - Non reactive or unequal pupils.
        - GCS drops by 2 or more.
        - Posturing
    - Signs of cerebral herniation present:
        - Perform limited hyperventilation (16-20 BPM).
        - Continue until signs of herniation cease.

Basilar Skull Fracture:

- Periorbital bruising/raccoon eyes (late sign), CSF from nose or ears, hearing deficit, and “Battle Sign” (late sign).
    - Apply dressings only to collect drainage. Do not pack the nose or ears.
    - Don’t let the patient blow their nose.