	COUNTY OF SACRAMENTO EMERGENCY MEDICAL SERVICES AGENCY	Document #	8015.27
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EMS Medical Director

EMS Administrator

Purpose:

A. To establish ~~serve as~~ the treatment standard for adult patients who have ~~received~~ traumatic injuries.

Authority:

A. California Health and Safety Code, Division 2.5
B. California Code of Regulations, Title 22, Division 9

Protocol:

BLS

1. ABC's / Routine Trauma Care - Time on scene for critical trauma should not exceed 10 ~~12~~ minutes under normal circumstances. Conditions requiring extended scene times shall be documented.
2. Administer supplemental O_2 as necessary to maintain $SpO_2 \geq 94\%$. EXCEPTION: Head injuries require 100% O_2 by non-rebreather
3. Be prepared to support ventilation with appropriate airway adjuncts when indicated
4. Spinal Motion Restriction (SMR) if indicated
5. Prepare for immediate transport
6. Amputations:
   - Dress stump with dry sterile dressing. Place amputated part in sterile, dry container or bag and close. Place first container in second container or bag and tie it closed. Place in melting ice. Amputated part should not direct contact ice or water.
7. Evisceration:
   - Cover with large sterile saline soaked dressing. Do not replace abdominal contents.
8. Hemorrhage Control:
   - The best method of control is direct pressure. If unable to control with direct pressure, see PD# 8065 – Hemorrhage.
9. Impaled Object:
   - Only to be removed when its presence interferes with CPR or impaled object interferes with the airway.
10. Open Chest Wounds:
    - Cover with an occlusive dressing and tape on three sides loosely. If signs of tension pneumothorax develop (distended neck veins, cyanosis, tracheal shift, absent breath sounds on one side, falling BP, dyspnea), remove the dressing, allow air to escape and reapply dressing.

NOTE: A third party vendor dressing specifically designed for ~~of~~ use with open chest wounds which allows ventilation of air is acceptable for use.

11. Orthopedic Trauma:
    - Check for pulse before and after splinting and document.
    - If angulated and **NO** pulse, then attempt to gently straighten, unless pain or resistance is met, and splint.
    - If angulated, stable and **GOOD** pulse, splint in position unless transport would be compromised.
    - Open fractures should be treated with moist sterile dressing and not reduced. The exception would be a traction splint to an open femur fracture. In this case, it is essential to notify hospital staff (as well as written documentation) of the presence of an open fracture.
12. Eye Trauma: ~~Injuries:~~
    - Position patient, sitting upright if comfortable, unless spinal immobilization is indicated. Impaled objects should be stabilized, not removed. Embedded foreign bodies in eye, cover both eyes loosely with protective dressing and avoid pressure to globe.
13. Chemical:
    - Acid or alkali irrigate with water or normal saline on all chemical injuries. Irrigate profusely until the patient reaches the hospital.
    - Remove contact lenses

~~14. Trauma:~~
- ~~Cover both eyes loosely with protective dressing and avoid pressure to globe~~

15. Head Trauma:
    - If in shock, treat according to shock protocol. 100% O_2 via Non-Rebreather Mask
    - Scalp hemorrhage can be life-threatening and will be dressed with a pressure dressing for signs of significant bleeding, or active brisk/heavy bleeding. Check for:
        a. Alertness
        b. Verbal response
        c. Pain response
        d. Unresponsiveness
16. Prepare for immediate transport.

ALS

1. Advanced airway adjuncts as needed - confirm advanced airway placement with continuous waveform capnography.
2. Cardiac monitoring and SpO_2
3. Establish large bore Intravenous (IV) access with normal saline (NS)/ titrate to a Systolic Blood Pressure SBP ≥ 90mmHg for patients meeting Trauma Triage Criteria. If patient meets physiological criteria, start a second large bore IV.
4. Decompression of Tension Pneumothorax:
    a. Indications:
        - Unilateral decreased breath sounds with a history of chest trauma and:
        - Severe respiratory distress and/or
        - SBP ≤ 90 mmHg or loss of radial pulse due to shock

        OR

    b. Traumatic arrest with evidence of chest trauma or suspicion that a tension pneumothorax is contributing to the arrest.
5. If indication is present: Decompression of a tension pneumothorax should be immediately accomplished with insertion of a 3.25" 14 gauge chest decompression needle. The location for needle decompression can be either:
    - The 3rd or 4th intercostal space, anterior axillary line
    - The 2nd intercostal space, midclavicular line

a. Subsequently, if all the criteria are met for tension pneumothorax on the opposite side, needle decompression should be performed on that side.
b. Decompression of suspected pneumothorax in traumatic arrest should be performed bilaterally.

~~**NOTE:** If anatomical variation precludes access to the midclavicular line approach, decompression can be attempted by placing a needle on the affected side at the 3rd or 4th intercostal space, anterior axillary line.~~

6. Orthopedic Trauma:
    - Patients presenting in severe pain from amputation and/or suspected extremity fracture(s), including hip or shoulder injuries or dislocations, consider administration of pain medication per PD# 8066 – Pain Management.

Cross Reference:
PD# 5050 – Destination
PD# 8020 – Respiratory Distress: Airway Management
PD# 8044 – Spinal Motion Restriction (SMR)
PD# 5052 – Trauma Destination
PD# 5053 – Trauma Triage Criteria
PD# 8065 – Hemorrhage
PD# 8066 – Pain Management
PD# 8032 – Traumatic Full Arrest