CENTRAL CALIFORNIA
EMERGENCY MEDICAL SERVICES
A Division of the Fresno County Department of Public Health

Manual Emergency Medical Services Administrative Policies and Procedures	Policy Number 530.23
Subject Paramedic Treatment Protocols **TRAUMA**	Page 1 of 3
References Title 22, Division 9, Chapter 4 of the California Code of Regulations	Effective Fresno County: 01/15/82 Kings County: 04/10/89 Madera County: 06/15/85 Tulare County: 04/19/05

STANDING ORDERS	
1. Assessment	ABCs
2. Secure Airway	Protect with position, basic airway maneuvers, pharyngeal airway, advanced airway if indicated, assist respirations as needed, suction as needed. Cover any open chest or airway wounds. Observe for tension pneumothorax.
3. Control Bleeding	Direct pressure. Bandage injuries enroute as time allows. Apply moist sterile dressing to eviscerations.
4. Spine Immobilization	As per protocol – EMS Policy #530.02.
5. Fentanyl	25-100 mcg IV/IM/IN push every 5 minutes until pain is relieved or a change in level of consciousness. Recheck BP before each dose. Maximum total dose of 100 mcg. Pediatric dose: Fentanyl 1mcg/kg/dose IV/IM/IN push. Repeat once after 5 minutes, if needed.
6. Transport	Minimize on scene time.
7. Advanced Airway	If indicated. Consider possibility of C-spine injury. Use in-line spine immobilization.
8. Oxygen	If indicated. Low flow. High flow if unstable. Suction as needed. Hyperventilate with bag-valve-mask or oxygen-powered breathing device if progressive worsening of mental status, unilaterally dilating pupil, or new onset of posturing. Refer to EMS Policy #530.02.
9. Complete Assessment	Complete vital signs if patient is STAT.

STANDING ORDERS – CONTINUED ON NEXT PAGE

Approved By **Signatures on File at EMS Agency** EMS Division Manager	Revision **01/01/2015**
Signatures on File at EMS Agency EMS Medical Director	

Subject	Policy
Paramedic Treatment Protocols – Trauma	Number 530.23

STANDING ORDERS	
10. IV Access (Two 14 or 16 gauge)	If indicated. Saline Lock or Lactated Ringers with standard tubing. Fluids are to be administered to keep systolic blood pressure greater than 90 or to maintain a radial pulse. Pediatrics – LR 20cc/kg if BP is less than 80 with signs/symptoms of shock. (Refer to EMS Policy #530.32, for estimated weight formulas or use Broselow tape.) NOTE: May establish IV earlier for pain management if patient is non-stat.
11. Cardiac Monitor	If indicated. Treat rhythm if appropriate.
12. Contact Hospital	Per EMS Policy #530.02.

BASE HOSPITAL ORDERS	
*1. Needle Thoracostomy	If tension pneumothorax is present, and patient is hypotensive with BP less than 90 – refer to EMS Policy #530.02.

SPECIAL CONSIDERATION AND PRIORITIES

1. Assessment – Primary survey (airway, breathing, circulation, delicate CNS). Identify immediate life threats. Mental status (if altered – monitor pupil size and reactivity), lung sounds, neck vein distension, survey of injuries, and mechanism of injury (penetrating or blunt? Ejected? Speed of vehicle and direction of impact? Damage to steering wheel or windshield? Fatalities in same vehicle? Extrication longer than 20 minutes? Patient wearing seatbelt?)

2. On-scene time must be less than 10 minutes unless multiple patients or prolonged extrication complicated the incident. (Document on Prehospital Care Report any delays at scene.)

3. Spine equipment and airway equipment should be brought into the incident site on the gurney.

4. Unstable or STAT patients require immediate transport with ALS treatment enroute. On-scene treatment should be limited to BLS airway management, covering an open chest wound, pressure to major bleeding, and spine immobilization.

5. For patients who require immediate transport, once loaded and enroute, assess blood pressure. Enroute initiate airway therapy, IVs, and oxygen. Contact Base as soon as possible with ETA.

6. Transport lights/siren all patients in shock or unstable.

7. Physical Assessment – breath sound equality, neck vein distension, tracheal shift, chest trauma, pelvic fractures, long bone fracture, obvious source of blood loss.

8. Shock is seldom due to brain trauma. Shock in the setting of trauma is caused by blood loss.

9. Repeated neuro exams are essential (emphasize mental status, pupils, respiratory pattern, motor response). Deteriorating neuro status is an emergency.

10. Amputation Considerations: Wrap extremity in dry sterile gauze, place in plastic bag, and bring to hospital on ice if possible.

Subject	Policy
Paramedic Treatment Protocols – Trauma	Number 530.23

11. Hanging Considerations: Although hanging is part of trauma in most paramedic texts, the majority of EMS calls dealing with "hanging" are predominantly asphyxiation/strangulation cases. This means patients with a mechanism of injury of a hanging need spinal immobilization and trauma consideration, and should be treated as a medical cardiac arrest if found pulseless and non-breathing.

12. Use MIVT format when reporting to trauma staff or transfer to another unit or helicopter:

    "M" Mechanism
    "I" Injuries
    "V" Vital Signs
    "T" Treatment