

Milstein ED Trauma Guidelines Updates

Rationale

- We are updating our trauma guidelines in order to standardize the approach to various levels of traumatic injuries
- Our goal is to provide a more timely, thorough and efficient trauma evaluation
- Patients that initially appear stable, may have significant injuries that are predictable based on the mechanism of injury
- There were several cases that highlighted the need for these updates and two examples are discussed here

Case Example 1

- 42 yo M crashed motorcycle into tunnel wall going ~65 mph. Arrived via EMS.
- CC: L chest, arm and leg pain. VSS.
- Initially sent to Mint
- After evaluation, sent to Main ED
- Diagnosed multiple rib fractures, pulmonary contusions, open L knee laceration
- Admitted to Orthopedics and taken to OR next day

Case Example 2

- 24 yo F walk in, CC at intake “R leg pain s/p fall from bicycle”
- Triage to Mint. VSS. Evaluated approximately 2 hours after arrival
- Further questioning: was riding electric scooter with husband and both hit by car at unknown speed but “fast” per pt
- Both thrown and husband with leg fracture in Main ED
- Pt with negative XRs and negative FAST

Response Process

Milstein ED Trauma Activation Guidelines

ALL Trauma CODE and ALERT Patients Evaluated in DART Room

Trauma CODE	Trauma ALERT	
<p>If a patient has below criteria or pre-arrival notification of below criteria, call 305-3333 and say "Trauma STAT Adult ED Trauma Room 305-5747"</p> <p>Activate as above so surgery team is involved. Broadcast ED notification "Trauma CODE" & place patient in DART room if there is trauma with:</p> <ul style="list-style-type: none"> GCS < 10, sBP < 90, RR < 10 or > 29 Traumatic arrest Emergent airway Penetrating injury to: <ul style="list-style-type: none"> head, neck, thorax, back, abdomen extremities proximal to knee or elbow Multiple long bone fractures Extremities crushed, deployed, mangled, pulseless, or amputated proximal to knee/elbow Fall > 20 feet Paralysis/Spinal Cord injury MVC with ejection, death in same compartment Burns >10% or inhalational injury Open or depressed skull fracture Chest wall instability/deformity (i.e. flail chest) Motorcycle crash > 20 mph or separation of bike and rider ED team deems necessary 	<p>Broadcast ED notification "Trauma ALERT" & place patient in DART room if there is trauma that meets below criteria. Do not need to activate surgery unless CODE criteria also met:</p> <p><u>Anatomy:</u></p> <ul style="list-style-type: none"> Penetrating extremity trauma distal to elbow & knees only if hard signs of vascular injury <ul style="list-style-type: none"> Absent pulses Signs of ischemia Palpable thrill Active pulsatile hemorrhage Expanding hematoma <p><u>Mechanism:</u></p> <ul style="list-style-type: none"> MVC prolonged extrication (> 20 minutes) MVC rollover MVC with significant damage (high speed (>40 mph), intrusion >12 in., vehicle deformity >20 in.) Pedestrian vs. vehicle with > 5 mph impact, thrown or run over Bicyclist/scooter/moped run over, separated from vehicle, or significant injury to another person involved Trauma in pregnant patient >20 weeks (consider OB consult) High suspicion of injury <p><u>Specific Head Trauma Criteria for Alert:</u></p> <ul style="list-style-type: none"> Head injury on anticoagulants/anti-platelets Head injury with AMS, intoxication, seizure Head trauma AND GCS ≤ 14 Violent/agitated patient with evidence of head trauma ≥ 65-year-old patient WITH head trauma 	<pre> graph TD A[Trauma Patient Identified (only B/C for initial notification*)] --> B[Trauma CODE] A --> C[Trauma ALERT] B --> D[Bring to DART Room] C --> E[Bring to DART Room] D --> F[Broadcast ED notification "Trauma CODE"] E --> G[Broadcast ED notification "Trauma ALERT"] F --> H[Area Attending, team and PGY3 respond] G --> I[Area Attending, team and PGY3 respond] H --> J[Activate Trauma Team] I --> K[PGY3 resident performs 1° and 2° survey] J --> L[PGY3 resident performs 1° and 2° survey] K --> M[PGY1 performs eFAST] L --> N[PGY1 performs eFAST] </pre>

*If clinical observation is required after initial evaluation and stabilization, formal handoff to Area D attending can occur. Initial attending responsible for primary documentation.

Highlights

- Initial trauma notifications only for areas B and C
- ALL trauma notifications evaluated in DART room (will need to be brought back around from Pivot)
- No longer will have “Head Trauma” notifications as this would be a “Trauma Alert” or “Trauma Code” notification depending on their degree of injury