

EM Basic- Trauma Resuscitation Part 1

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Pre-arrival- starts with notification of an incoming patient

Triage- have some system to determine which patients require a greater response from the trauma team (for example- hypotension, altered mental status, unprotected airway)

Do you need blood products?

Do you anticipate the need for an airway?

-If so, draw up medications ahead of time

30 of etomidate and 200 of succinylcholine is a good start

Clearly define roles in the trauma bay. Who is the team leader? What is each person going to do? Team leader takes charge and should be the only voice in the room directing the resuscitation. PPE on every person

At a minimum:

- 1) Team leader- runs resuscitation and does primary/secondary survey, procedures
- 2) Nurse on one side of the patient- IVs, meds, exposure, etc
- 3) Tech or medic on other side- IVs, exposure, etc.
- 4) Recorder (usually a nurse)

Usual trauma center staffing- adds the following

- 1) Trauma team leader- ONLY runs resuscitation, stays at foot of the bed, doesn't get involved in patient care
- 2) Provider at the head of the bed- airway, HEENT exam
- 3) Provider on either side of the patient- procedures and surveys

How to do a GCS in the trauma Bay

Awake, talking, and not confused = 15

Awake, talking but confused/repeating questions= 14

Comatose, no response= 3 (3T if intubated)

Conscious but not following commands = 8 (consider intubation to protect airway)

Flow of the resuscitation (with approximate times)

Patient arrival and transfer to ED stretcher (15-20 seconds)

Primary survey- ABCDEs/Massive hemorrhage - (15-30 seconds)

Airway- is it patent? Any obstruction? Ask the patient their name

Breathing- bilateral equal breath sounds (anterior chest)

Circulation- distal pulses (radial, femoral, DPs)

Disability- moves all extremities? GCS (see other column)

Exposure- start removing all patient's clothing, expose injuries

Massive hemorrhage- apply tourniquets ASAP

EMS report and secondary survey (3-5 minutes)

Room quiet for EMS report

Secondary survey starts during EMS report (don't report findings until EMS report over)

HEENT- Examine scalp for bleeding (if clotted, keep bandages on), check forehead, midface, and jaw for tenderness/injuries, pupil size and reactivity, ears for hemotympanum, nasal septum for hematoma, oral cavity for lacerations/broken teeth and mouth opening, obtain AMPLE history

C-spine- have someone else keep c-spine control, remove collar, palpate c-spine and look for injuries

Chest- recheck lung sounds, assess for tenderness, injuries, crepitance

Abdomen- check for tenderness, rigidity, rebound/guarding, bruising

Pelvis- check for stability- DON'T ROCK!- squeeze laterally from the iliac crests inwards and then push down anterior/posterior

Lower and upper extremities- tenderness, deformities, pulses

ROLL THE PATIENT- (1-2 minutes)

Log roll the patient, assess for tenderness, step-offs, injuries

Rectal exam PRN- if not done, ask patient to "squeeze your butt cheeks together to check general peri-rectal tone

Place chest x-ray film under patient and roll back

Package patient for CT scanner/OR/ICU (30-60 seconds)

Goal- out of trauma bay in less than 10 minutes unless critical interventions are needed (airway, chest tube, emergent laceration repair, etc)