

# Penetrating Injury to Chest

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## GSW to chest

- EMS dispatched to a home
- Found 12 yr old GSW to left chest as a bystander in home shooting
  - Lying prone
  - Entrance wound left chest near nipple, no exit, not much blood

## GSW to chest

- Dispatched at 1624
- Pt gasping, GCS 3, PR 164
- Oxygen by BVM – O2 sats > 90
- IV started, 30 ml of NS given



# GSW to chest

Question #1: The most important therapeutic maneuver by EMS is:

1. IV resuscitation
2. Airway management
3. Rapid transport
4. Hypothermia prevention

# GSW to chest

- Triage Room
  - Arrived 1637 (13 minutes later)
  - Systolic 60, PR 159, O2 100%
  - Intubated with RSP
  - 28 Fr CT placed left chest
  - Developed bradycardia, and has cardiac arrest



## GSW to chest

Question #2: The trauma surgeon should:

1. Place another CT into the left chest
2. Give more blood while performing CPR
3. Stop since the patient is dead
4. Perform ER resuscitative thoracotomy

## GSW to chest

- Triage Room continued
  - BP restored within 5 minutes
  - PRBC's via rapid infuser, crystalloid, one dose of EPI
  - 2<sup>nd</sup> CT placed
  - Bullet palpable in SQ left of midline

# GSW to chest





## GSW to chest

- Triage summary – 44 minutes
  - 3 units PRBC, 2 L crystalloid
  - CT output after initial dump minimal
  - PR 160 to 140; sys BP > 100 for 20 min
  - O2 sats 100%; wt 40 kg
  - Initial Labs: Hb 10.6; plts 198; BE -10, INR 1.3
  - Estimate blood loss – 25 ml/kg

# GSW to chest

Question #3: This patient should go to:

1. Operating room for immediate thoracotomy
2. PICU for monitoring with OR team on standby
3. Remain in the ER for resuscitative thoracotomy
4. Angiography



## GSW to chest

- PICU course (arrival 1724)
  - 120 ml total in both CT per PICU note
  - PR 120, systolic BP 120/72, sats 100%
  - 1910 (106 minutes later) – Sat falls to 73%, copious blood from ETT; pt bagged and arrests per bedside nursing documentation
  - Becomes and remains asystolic
  - Copious CT output of new bleeding

# GSW to chest

Question #4: The pt should undergo:

1. Nothing – pt is dead
2. Resuscitative thoracotomy in PICU
3. Rapid transport to OR for thoracotomy
4. Angiography

## GSW to chest

- Resuscitative thoracotomy
  - No hilar injury
  - No tamponade
- Pt expired.
- Presented at Peer Review but ME could not discuss case due to criminal nature.