

Scenario

The paramedics were called to a house where there are multiple persons injured from penetrating trauma. A 5 year old girl was caught in the middle of gang related activity and sustained a penetrating injury to the chest. The child was shot in the left chest and is in significant respiratory distress.

On arrival to the trauma bay the following is noted:

- Primary survey:
 - Airway: Patent
 - Breathing: Dyspnea; RR rapid, shallow and labored with no movement of L lateral chest wall; breath sounds absent on the left. SpO2 85% on 4L non-rebreather
 - Due to concern for a hemo-pneumothorax a chest tube is placed with immediate evacuation of blood and air.
 - Circulation: Radial pulses thready. Child is cool and clammy. Bilateral large bore IVs are started in the ante-cubital fossae.
 - After a 20/kg NS bolus is given the child is given 20/kg of PRBCs and 20/kg of FFP
 - GCS: 15. eyes open spontaneously; voice is oriented and moves extremities to commands. Pupils are PERL.
- Secondary survey:
 - VS: BP: 96/72; P: 136; RR: 32 shallow and labored.
 - No other injuries noted.
 - Chest x-ray with concern for retained hemothorax, lung expanded
 - Due to ongoing bleeding from the chest the child is taken emergently to the operating room.

The child experienced the following OR course:

- The child is intubated with a 4.5 cuffed endotracheal tube secured at 12 cm at the lips.
- She is receiving an additional 20/kg of PRBCs and 20/kg of FFP as well as platelets.
- A left sided anterolateral thoracotomy incision is performed in the 5th intercostal space.
- There is significant injury to the left upper lobe, an injury to the subclavian artery, as well as an intercostal vessel.
 - The left upper lobe is resected.
 - The subclavian artery is explored and repaired.
 - The intercostal vessel is ligated.
 - The chest is thoroughly irrigated out with no evidence of ongoing bleeding.
 - 0.25% Marcaine is used to perform rib blocks.
 - A 14 Fr chest tube is positioned at the left apex through the 7th intercostal space.

- The incision is closed in layers. Skin glue and steri-strips are used to close the wound.

I-SBAR Handoff Information

- Introduction:
 - I am calling from the OR about the trauma patient that will be coming up to the PICU
- Situation:
 - Patient age – 5 year old
 - Gender - female
 - Pre-op diagnosis – gun-shot wound to the left chest
 - Procedure – left thoracotomy, left upper lobe resection, repair of left subclavian artery, ligation of intercostal vessel, and chest tube placement.
 - Mental status pre-procedure – GCS 15
 - Patient stable/unstable - stable
 - Pertinent medical history - history of asthma, uses inhaler as needed
 - Allergies - none
 - Sensory Impairment - none
 - Family location – OR waiting room
 - Religion/culture – none specified
 - Interpreter required – No, speaks English
 - Valuables deposition – given to family
 - Meds given – fentanyl, Marcaine, Toradol, Ancef 1 gram
 - Blood given – units available – received 2 PRBS, 2 FFP, 1 Platelet; additional available in blood bank
 - Musculoskeletal restrictions - None
 - Tubes/drains/catheters – left sided chest tube to atrium pleura-vac set to -20 and suction
 - Dressings/cast/splints – Gauze and Tegaderm at chest tube site. Skin glue and steri strips at incision
 - Counts correct - Yes
 - Other – lab/path pending - None
 - Vitals – Stable – SBP 100, HR 80, RR 25, Intubated, SPO2 100%, Weight 25 kg.
 - Initial Ventilator Settings :
 - Mode - Volume control with pressure support
 - Rate – 25
 - PEEP – 5
 - Inspiratory Time – 0.6
 - PIP 16
 - FiO2 – 60%

- Isolation required - No
- Specific care required immediately or soon:
 - Will come intubated
 - Pain control
 - Chest tube management
 - Fluid management
 - Laboratory evaluation
 - Antibiotic plan
 - Family communication