A stab near the heart...
(is it too late?)
Introduction

• Called to A+E:
  • Trauma: stabbing in a 77 year old gentleman.
Presentation

- 77 year old gentleman.

- Stab wound to left upper thorax.

- Stab wound to right neck, submental.

- PEA arrest in ambulance:
  - CPR and adrenaline with return of pulse.

- PEA arrest in resus:
  - CPR and adrenaline with return of pulse.
On examination

• Airway & Breathing: oropharyngeal airway, sats 92%.

• Circulation:
  • Four 18G cannulae.
  • Blood pressure difficult to record.
  • IV fluids (bolus).
  • Transfused with RCC (first unit).
What next?
Treatment in resus

- Intubated by anaesthetics.

- Bilateral thoracotomies:
  - Right: nil drained, connected to underwater drain.
  - Left: 700mls bright red blood.

- Urinary catheter inserted, draining urine.

- Vitals:
  - HR: 85
  - Sats: 94%
  - BP: 118/85
  - Temp: 35C
On examination

• Head:
  • Bruising and haematoma around right eye.
• Chest:
  • Deep laceration left upper thorax (approx 4cm long).
  • Multiple superficial stab wounds over thorax.
• Abdomen:
  • Multiple superficial stab wounds over abdomen.
  • Distended, tense.
• Peripheries:
  • Cold, hypo-perfused.
• Log roll:
  • No injury to back.
To CT scan or to go to theatre?
Brought to CT

• While waiting to put him in the CT scanner:
  • BP begins to drop (90/60).
  • HR: 105.
  • Sats: 94%.
  • On 4th unit of RCC.
  • FFP on order.
  • Still making urine.
Redirected to theatre

- Patient’s chart arrives and background history noted
- Has now had 4 units of RCC.
- On table: ANOTHER PEA arrest, CPR for 2 mins, return of pulse.
Proceed with thoracotomy?
**Theatre**

- **Thoracotomy:**
  - Blood in pleural space.
  - Transected left internal thoracic artery tied off.
  - Multiple lung lacerations over-sewn.
  - No further bleeding.

- **Vitals:**
  - BP: 135/85
  - HR: 80
  - Temp: 34.9
  - Sats: 94%

- **Transfusion requirements:**
  - 8 units RCC
  - 2 units FFP
  - 1 unit platelets
  - 1g Tranexamic acid
Neck exploration:
- Blood in pleural space.
- Transected left internal thoracic artery tied off.
- Multiple lung lacerations over-sewn.
- No further bleeding.

Theatre

- **Vitals:**
  - BP: 70/30
  - HR: 120
  - Temp: 34.3
  - Sats: 85%

- **Transfusion requirements:**
  - 10 units RCC
  - 3 units FFP
  - 1 unit platelets
  - 1g Tranexamic acid

- Large amount of blood on the floor....

- Neck exploration:
  - Blood in pleural space.
  - Transected left internal thoracic artery tied off.
  - Multiple lung lacerations over-sewn.
  - No further bleeding.
**Theatre**

- **Vitals:**
  - BP: 125/80
  - HR: 80
  - Temp: 34.0
  - Sats: 94%

- **Transfusion requirements:**
  - 12 units RCC
  - 4 units FFP
  - 1 unit platelets
  - 1g Tranexamic acid

- Abdomen distended and tense

- **Laparotomy:**
  - No intra-abdominal injuries.
  - No further bleeding.
Post-op

- CT Brain: old ischaemic changes, no acute insult.
Post-op

• Infection of chest wound and slight dehiscence.

• Discharged to the ward.

• Currently weaning off ventilatory support and talking with speaking valve.

• Has yet to tell the full story!
ATLS

• Developed in America in 1970s.

• Structured approach to treating trauma.

• Follows stepwise approach:
  • Airway and cervical spine
  • Breathing and ventilation
  • Circulation and haemorrhage control
  • Disability and neurological assessment
  • Exposure and environmental control

• Secondary survey

• Trauma care has significantly reduced death from exsanguination in last 30 years, ATLS has at least contributed¹.

You must re-assess the patient after each intervention.