TRAUMA Tips and Tricks for GPs

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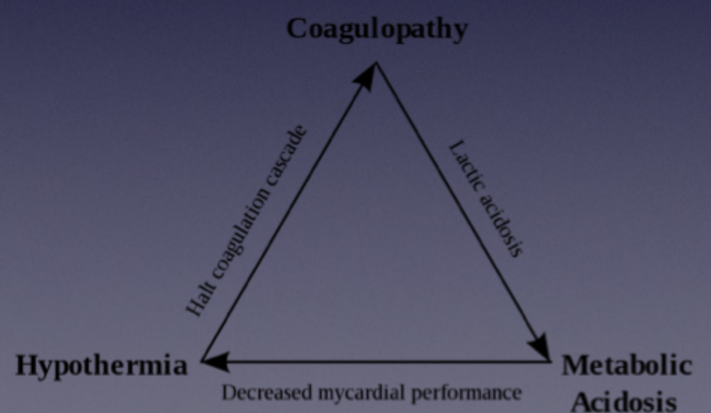
Triad of death

- Cold
- Acidosis
- Coagulopathy



Damage control resuscitation

- Correct coagulopathy
- Warm patient
- Fill patient
- Damage Control Surgery

Damage Control Surgery

- Non definitive surgery
- Patients unstable
- Aim is control of haemorrhage and control of sepsis
- Move patient to ICU to continue resuscitation
  - Make patient metabolically and haemodynamically stable
- Return to theatre for definitive procedure

Damage control for GPs

- ABCDE (CABCDE)
- Commence Resuscitation
- Warm patient
- Control of Haemorrhage
- Control of Sepsis
- Splint Fractures
- Move patient to major centre for definitive care

Airway

- Cricothyroidotomy
- Indications
  - Can’t get airway by conventional means
  - Can’t ventilate by conventional means
  - Severe facial trauma
- Most difficult aspect of cricothyroidotomy is making decision to do it

Breathing

- Needle Thoracostomy
- 2nd ICS mid-clavicular line
- 14g jelco
- 50% do not go in. Some go into lung
- 50% fail
- Easy to do

Not always useless but mostly

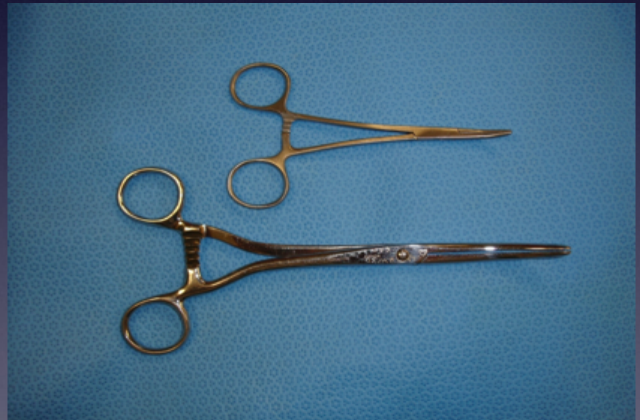
- Would I do it?

Breathing

- Finger thoracostomy
- Patient must be intubated, ventilated-Positive Pressure Ventilation
- Make hole as per chest drain
- Look and Listen for GUSH
- Prelude to chest drain
- Placement of immediate drain not required

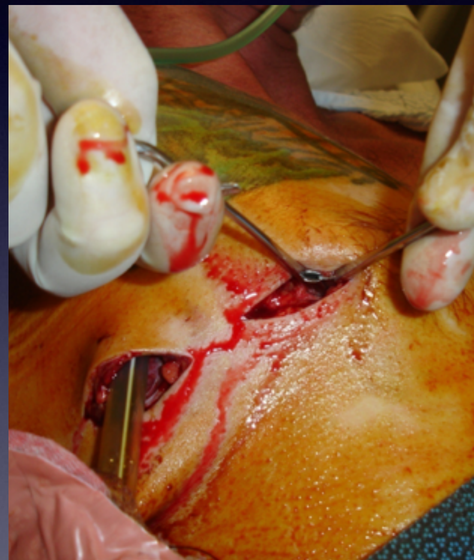
Chest Drain

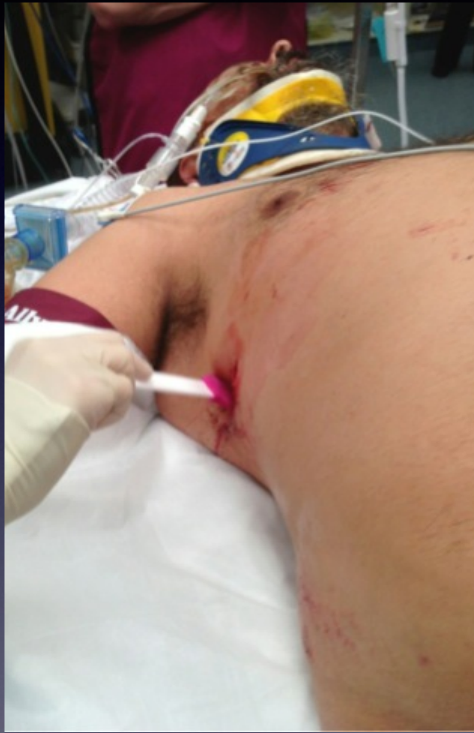
- Nipple level and above
- Big Drain (32Fr)
- 3cm incision
- Blunt dissection with artery clip

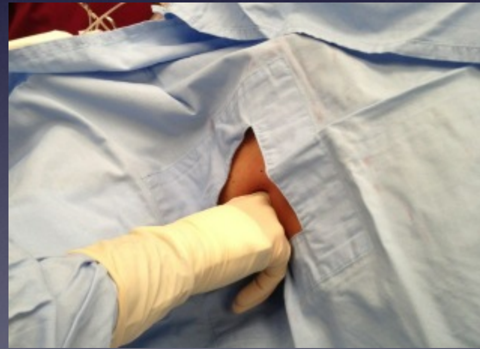


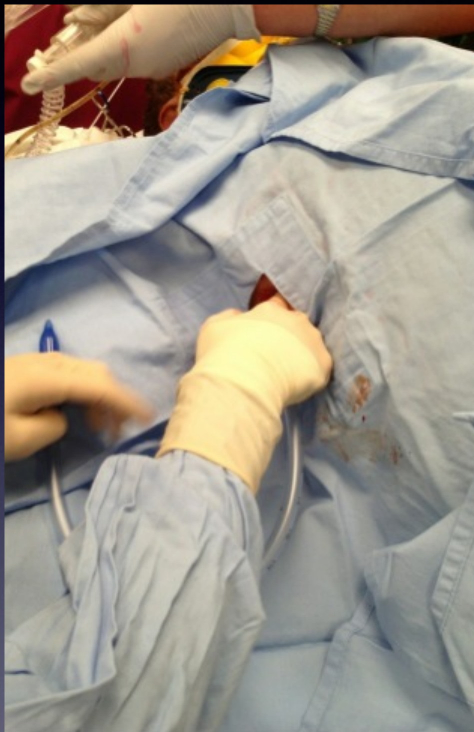
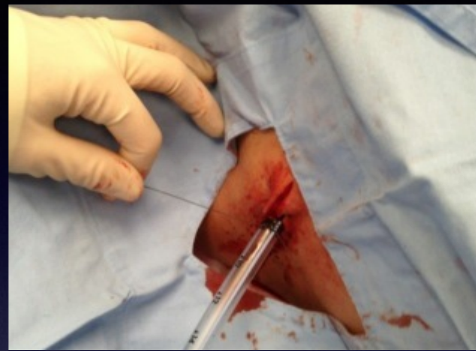
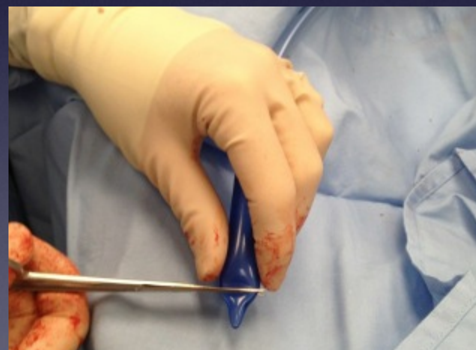
Chest Tube

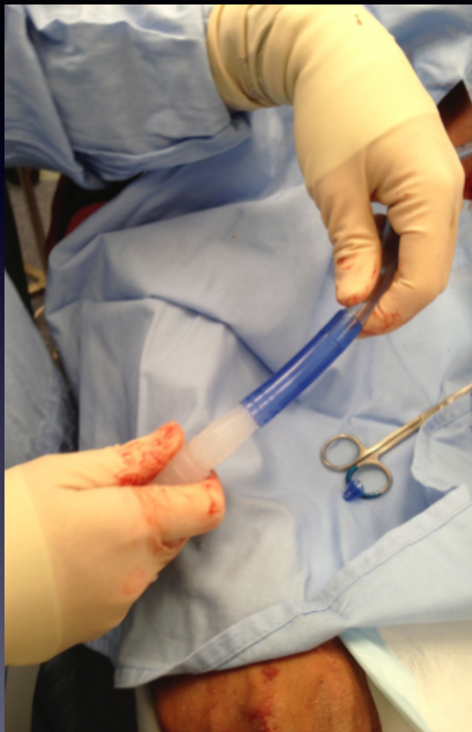
- Once in, open clip up wide
- Rip out
- Finger in and sweep
- Insert tube with finger
- Tie in
- Local Anaesthetic-lots +/- fentanyl and midazolam

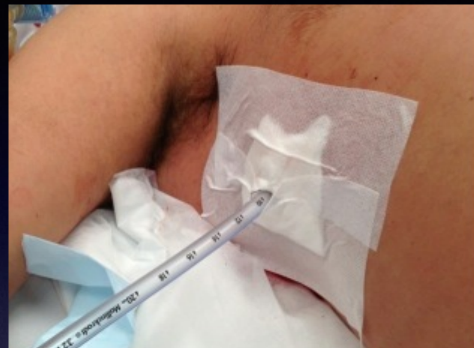


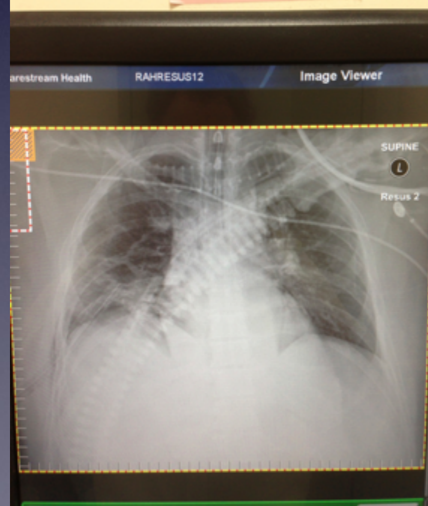










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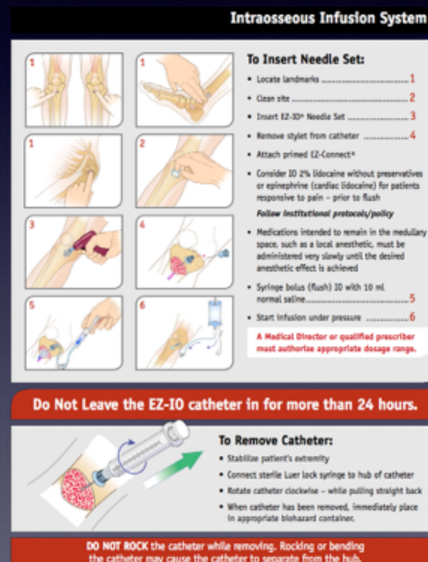
“Do not clamp chest tubes-it is dangerous!”

Circulation

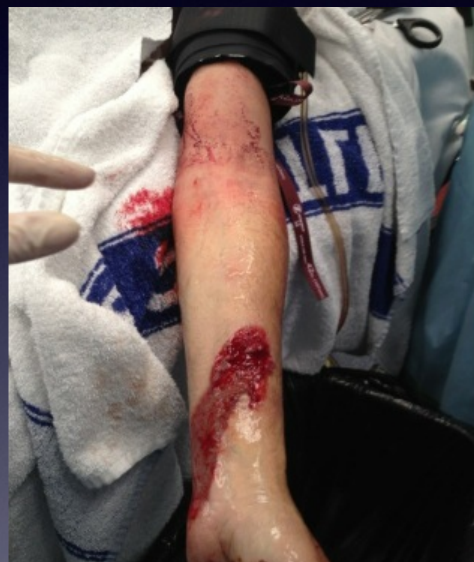
- EZ IO
- Rapid Infuser Catheter
- EJV cannulation
- Swan sheath into femoral vein
- Venous Cutdown

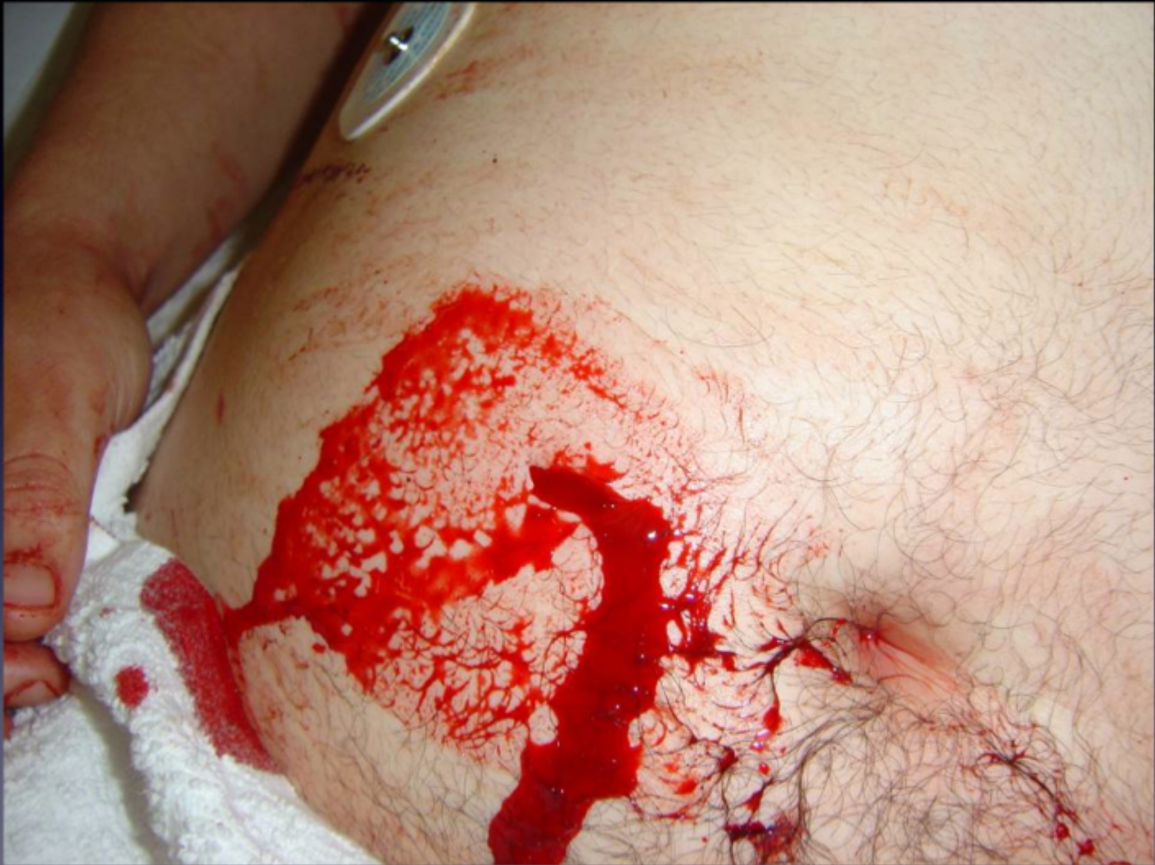


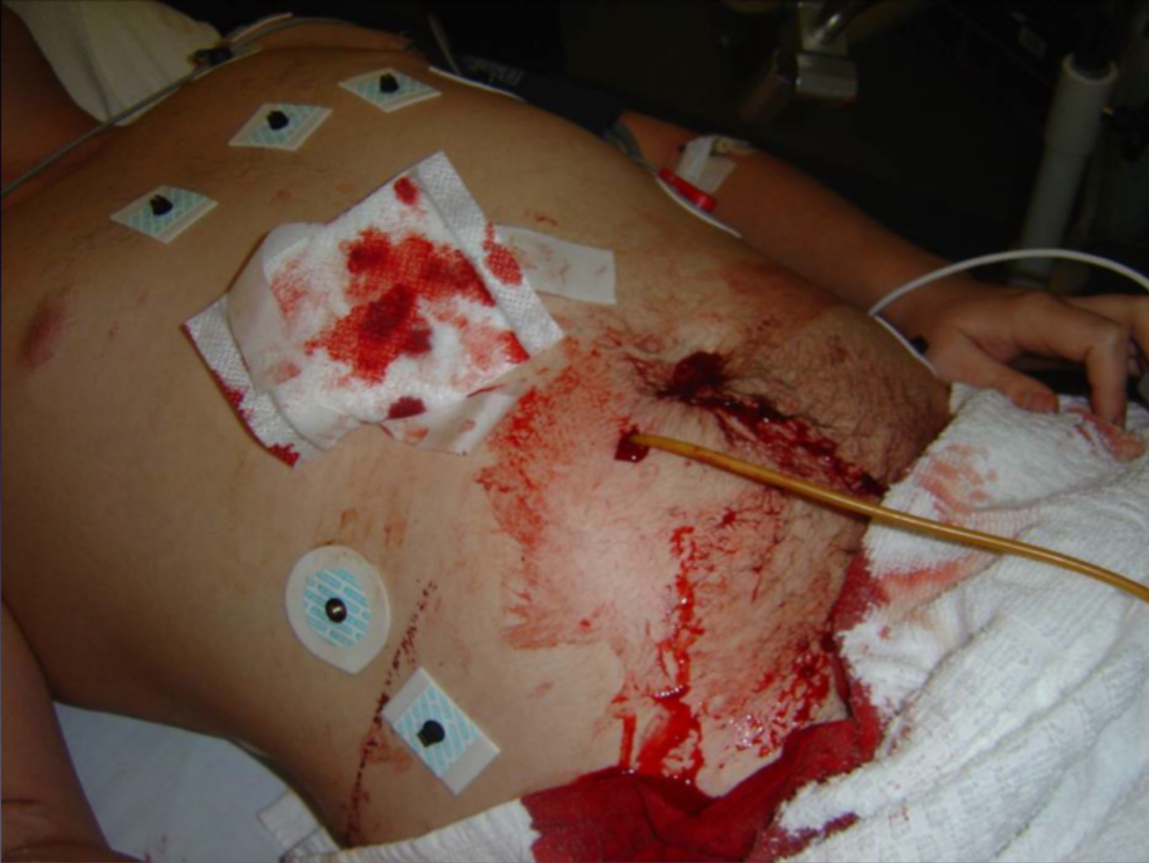
Haemorrhage Control

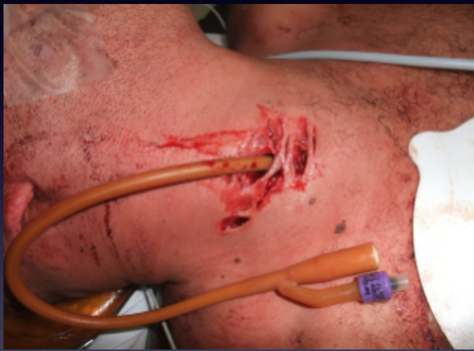
Limb
Pressure
Tourniquet

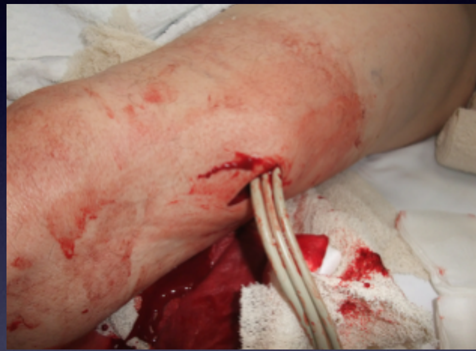
Torso
Pressure
Foleys catheter











Permissive Hypotension

- If patient able to talk to you coherently and making enough urine, can accept BP ~ 80 systolic
- Pushing fluid to aim for higher BPs thought to dilute clotting factors and dislodge clots
- In NON head injured patients

Abdominal Trauma

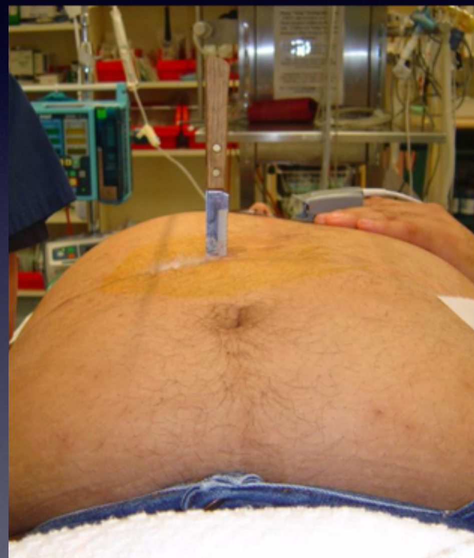
- Penetrating Trauma
- Blunt Trauma
- The 2 are different

Blunt Abdominal Trauma

- Spleen
- Liver
- Bowel
- Mesentery
- Pelvis
- Retroperineum

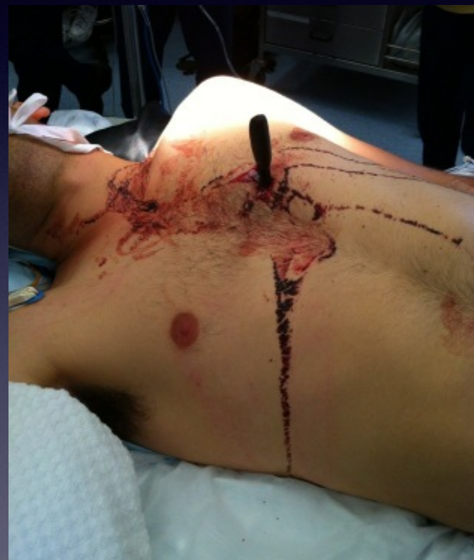
Penetrating Abdominal Trauma

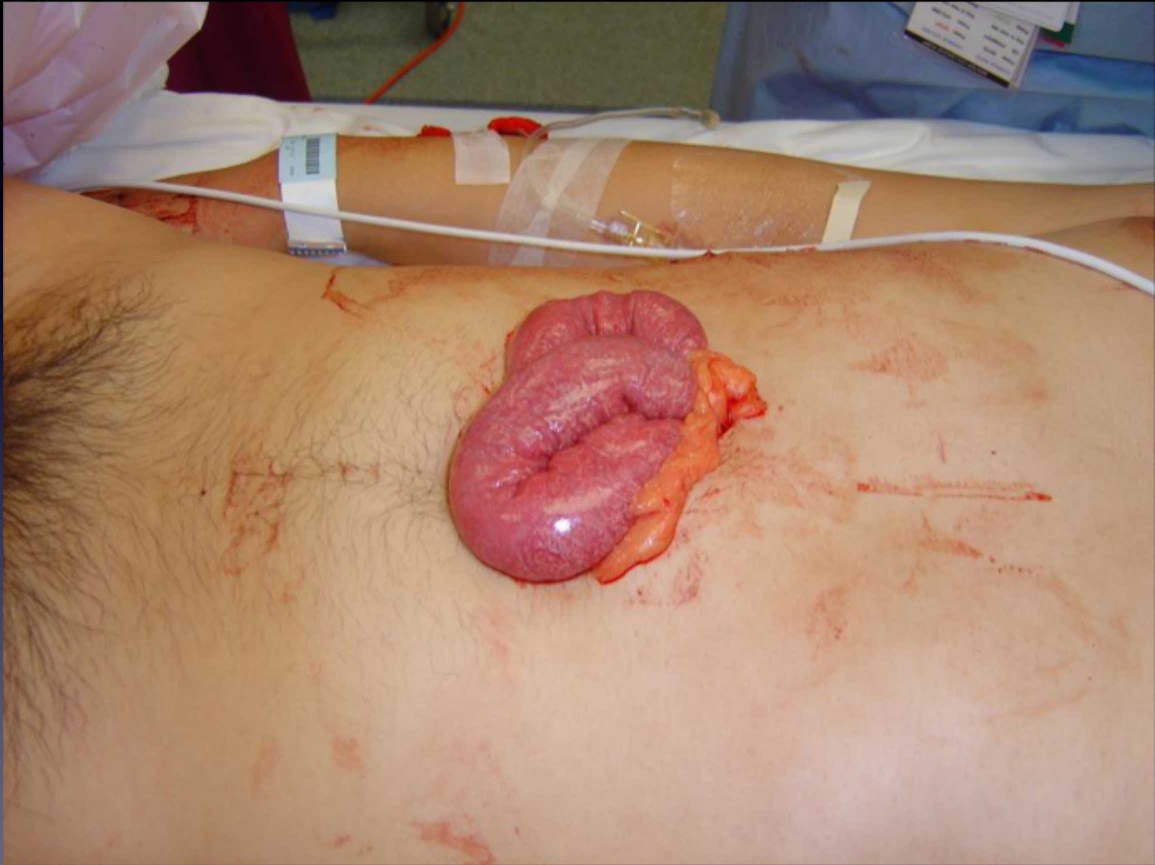
- Rule of Thumb
  - They all go in
- Other Rule of Thumb
  - They generally deserved it
- One medical condition where obesity is good



Penetrating Trauma

- If They're still in, Leave ‘em in





Penetrating Abdominal Trauma

- Local Wound Exploration
- Dipstick
- Finger

ALL ARE NONSENSE

- All should undergo surgical review
- Positive is positive but negative means nothing

Penetrating Abdominal Stabs

- Isolated stab wounds can be managed conservatively:
  - Patient haemodynamically stable
  - Patient has minimal signs
  - Patient alert and cooperative
- Only in a major trauma centre
- Multiple stab wounds probably need surgical exploration
- ALL SHOULD BE REFERRED FOR SURGICAL REVIEW

Gunshot Wounds

- All warrant a trip to the operating theatre

U/S

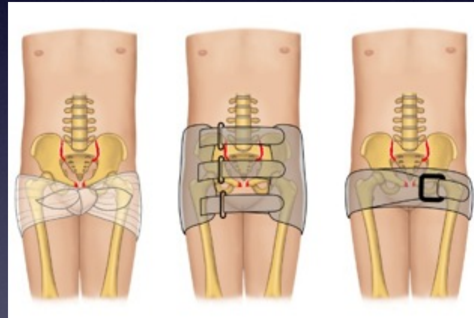
- FAST scan
  - Supplanted use of DPL
  - Detects presence of fluid in abdominal cavity and pelvis
- Extended FAST
  - Checks pericardium for fluid/tamponade
  - Checks for Pneumothorax

CT scan

- Gold standard investigation for blunt abdominal trauma
- Patient must be stable to perform
  - Logistically at the RAH, scan takes 30 min to perform
- Directly impacts patient management
  - Theatre vs interventional radiology vs conservative
- Dedicated contrast scans- combined arterial and venous phase

Pelvic Binder

- Pelvic Binder for all suspected pelvic injuries
- Position across greater trochanters-lower than you think
- Binder not available- use sheet and tie knees



Pelvic Spring

- If going to do it,do it only once
- If going to do Xray or CT- not necessary

Emergency Room Thoracotomy

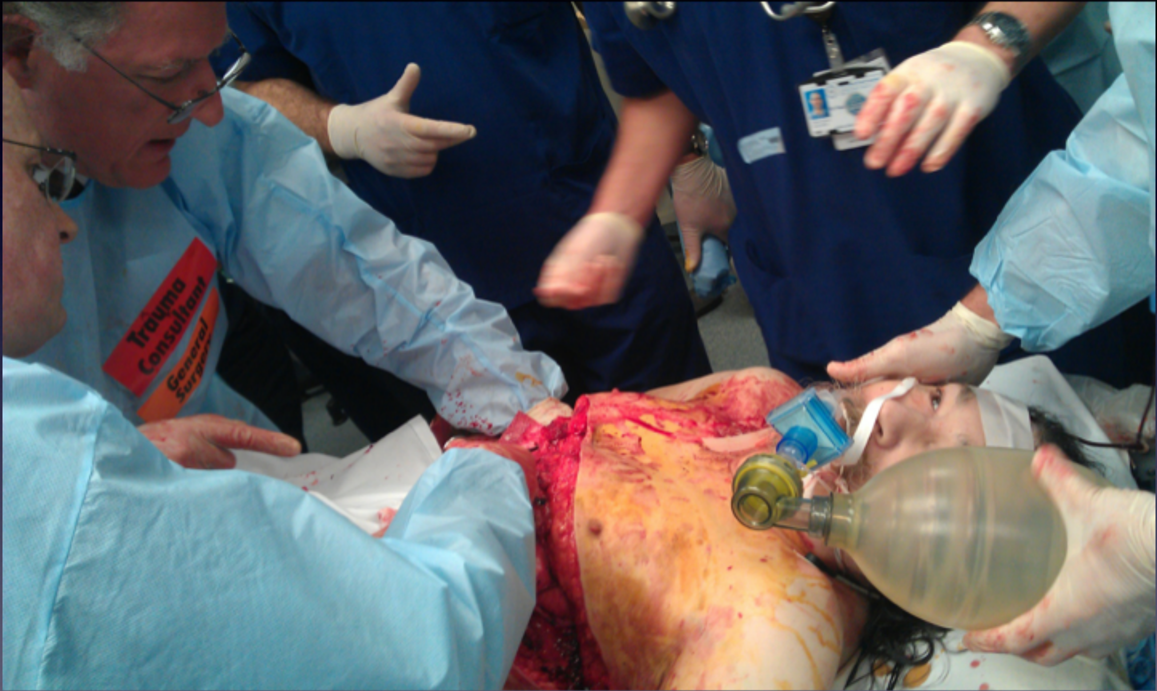
- Indications
  - Witnessed arrest within arrival in emergency room. Standard resuscitation efforts fail
- Penetrating trauma
- Blunt Trauma controversial

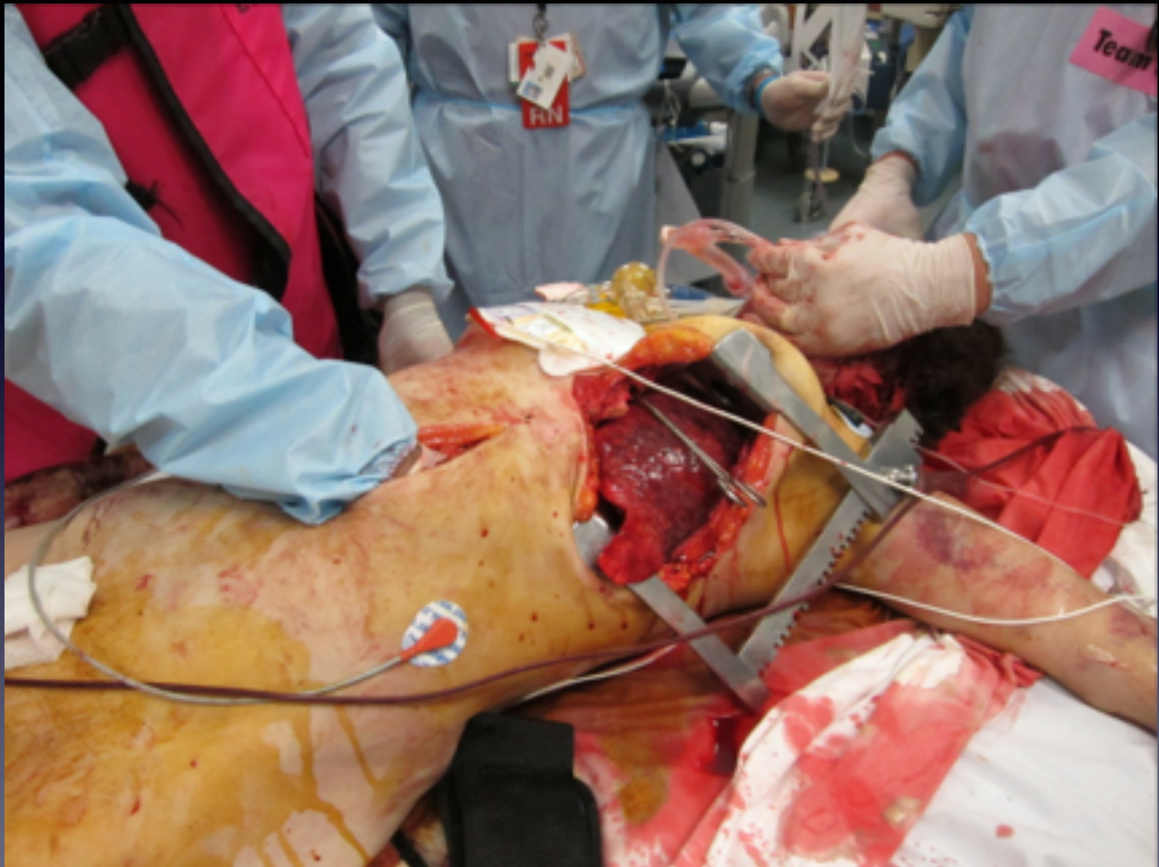
Aims of ED Thoracotomy

- Relieve cardiac tamponade
- Control bleeding
- Aortic compression

Risks of ED thoracotomy

- Potential for staff exposure
- Uncontrolled bleeding


Trauma Consultant
General


RN
Team

15:55
male unknown 40's

Other Points

- Blood taking-generally won't be used
- CT scans-not necessary as often need repeating
- If scans are done, please get radiology to make them available to us, we will review them early. SEND HARD COPIES
- Liaise early

Summary

- ?ABCDE (CABCDE)
- Warm patient
- Damage Control
- Package patient for transfer
- Do the Basics Well