Peggers’ Super Summary: Diagnostic Peritoneal Lavage

**Introduction:**

**Overview:**
- Indications
- CI
- Consent
- Complications
- Procedure

**Indications:**
- Abdominal Trauma

**Contraindications:**
- Guarding
- Penetrative Abdominal Trauma
- Non responder in resuscitation

**Consent:**
1. Indications
2. Risks
   - Infection
   - Bleeding
   - Perforation

**Equipment:**
Sterile Pack
Scalpel
Seldinger Technique
Gown
Gloves
Chlorhexidine
Sterile Drape
Syringe
Orange and green needles
Lignocaine 5-10ml of 1-2% (if time!)
Sutures

**Procedure:**

**OPEN TECHNIQUE**
1. Decompress urinary bladder
2. Decompress stomach
3. Aseptic technique and lignocaine
4. Vertical incision below umbilicus through skin and s/c tissues to fascia
5. Elevate fascial edges with clamps and incise fascia down to peritoneum
6. Incise Peritoneum
7. Insert peritoneal dialysis catheter into peritoneal cavity.
8. Advance while aspirating
9. If gross blood is not obtained instill 1L of warmed Ringer’s lactate.
10. Gentle agitation of abdomen aids in mixing
11. To collect fluid place bag on floor and allow collection > 30% of infused volume is adequate return
12. After collection send for
   a. Gram Stain (positive if food or bacteria found)
   b. Erthrocyte > 100,000 RBC/mm³
   c. Leucocyte > 500WBCs/mm³
13. N.B a negative lavage does not exclude retroperitoneal injuries ie
   a. Pancreas
   b. Duodenum
   c. Diaphragmatic Tears

**CLOSED TECHNIQUE**
1. Decompress urinary bladder and stomach
2. Aseptic surgical preparation of abdomen and anaesthetic s/c
3. Elevate skin either side of needle insertion.
4. Insert needle 18 gauge, resistance felt at both fascia and peritoneum
5. Insert guidewire into needle
6. Remove needle and insert catheter over guidewire
7. Connect dialysis catheter and syringe, if gross blood is not aspirated, infuse 1L of warmed Ringer’s or Normal Saline
8. Agitate abdomen and place bag on floor for collection and sending to the lab as above

**Complications:**
- False positive secondary to
  i. Skin incision
  ii. S/C tissues
  iii. Local anaesthetic insertion
- Peritonitis
- Laceration of urinary bladder
- Injury to other abdominal injury or retroperitoneal structure
- Wound infection at lavage site