

# Abdominal Examination

## Introduction

- **W**ash hands, **I**ntroduce self, ask **P**atients name & DOB & what they like to be called, **E**xplain examination and get consent
- Expose and lie patient flat

## General Inspection

- **Patient:** stable, pain/discomfort, jaundice, pallor, muscle wasting/cachexia
- **Around bed:** vomit bowels etc

## Hands

- Flapping tremor (hepatic encephalopathy)
- **Nails:** clubbing (cirrhosis, IBD, coeliacs), leukonychia (hypoalbuminemia in liver cirrhosis), koilonychia (iron deficiency anaemia)
- **Palms:** palmar erythema (hyperdynamic circulation due to ↑oestrogen levels in liver disease/ pregnancy), Dupuytren's contracture (familial, liver disease), fingertip capillary glucose monitoring marks (diabetes)

## Head

- **Eyes:** sclera for jaundice (liver disease), conjunctival pallor (anaemia e.g. bleeding, malabsorption), periorbital xanthelasma (hyperlipidaemia in cholestasis)
- **Mouth:** glossitis/stomatitis (iron/ B<sub>12</sub> deficiency anaemia), aphthous ulcers (IBD), breath odor (e.g. faeculent in obstruction; ketotic in ketoacidosis; alcohol)

## Neck and torso

Ask patient to sit forwards:

- **Neck:** feel for lymphadenopathy from behind – especially Virchow's node (gastric malignancy)
- **Back inspection:** spider naevi (>5 significant), skin lesions (immunosuppression)

Ask patient to relax back:

- **Chest inspection:** spider naevi (>5 significant), gynaecomastia, loss of axillary hair (all due to ↑oestrogen levels in liver disease/ pregnancy)

## Abdomen

- **Inspection:** distension (Fluid, Flatus, Fat, Foetus, Faeces), incisional hernias (ask patient to cough), scars, striae (pregnancy, Cushing's), spider naevi, movement with respiration (absent in peritonitis), obvious pulsations, distended portal-systemic anastomoses (portal hypertension)
- **Palpation:** ask if any pain (start away from painful areas)
  - Superficial palpation: crouch to patient's level and roll fingers of one hand over the 9 regions while watching the patient's face. Check for: tenderness, guarding (peritonitis), rebound tenderness (peritonitis).
  - Deep palpation: palpate deeply in each of the 4 quadrants with both hands – the upper hand to exert pressure, the lower hand to feel (you can be standing). Check for: masses, deep tenderness and, if relevant, Rovsing's sign (appendicitis) and Murphy's sign (cholecystitis)
  - Respiratory palpation
    - Liver: start from the RIF and palpate in increments towards right costal margin (push in on each inspiration) (hepatomegaly = metastasis/HCC, cirrhosis, hepatitis, RVF, leukaemia/ lymphoma)
    - Spleen: start from the RIF and palpate in increments towards left costal margin (push in on each inspiration). It can be felt better if patient rolls onto their right side with tucked legs (splenomegaly = lymphoma/ leukaemia, myelofibrosis, malaria, portal hypertension, haemolysis)  
*Spleen vs kidney: can't get above it spleen, spleen notched, spleen not ballotable, spleen moves down on inspiration*
  - Kidney palpation: one hand anterior, one posterior. Ask patient to expire and press up into renal angle with posterior hand and press down with your anterior hand – as patient breathes in you may feel it between your hands. Ballot the kidney by flexing the metacarpophalangeal joints of your posterior hand. Do 'flick, flick, stop' and repeat as necessary.
  - AAA palpation: press down with finger tips (one hand each side) in the horizontal plane of the umbilicus – start laterally and move medially (pulsatile mass can be normal, expansile mass is AAA)
- **Percussion**
  - General percussion qualities if relevant (percussion tenderness = peritonitis; tympanic = flatus)
  - Liver: start from the RIF, percuss upwards and find upper and lower borders (should become dull over liver)

- Spleen: percuss upward towards spleen from RIF (dull percussion note of the spleen is only heard when it is enlarged). Percuss up to Traube's space which is just above left costal margin in mid-clavicular line (if resonant = no splenomegaly)
- Flank: tap all the way across abdomen horizontally each way from centre. The flank should be resonant; if a dull percussion note is heard in flanks, demonstrate shifting dullness (patient roll to side and percuss all way across again) ± fluid thrill (patient's hand flat on abdomen mid-line and tap one side and feel other) (ascites)
- **Auscultation**
  - Listen for bowel sounds at ileocaecal valve in RLQ until heard, up to 1min (tinkling = obstruction; absent = paralytic ileus/peritonitis)
  - Aortic/renal bruits (1cm superior and lateral to umbilicus bilaterally)

### **Finally**

- Check for ankle oedema (hypoalbuminaemia)

### **To Complete Exam**

- Thank patient and cover them
- "To complete my exam, I would examine the external herneal orifices, the external genitalia and do a digital rectal examination"
- Summarise and suggest further investigations you would do after a full history