

CLINICAL SKILLS: ABDOMINAL EXAMINATION

Introduction

- Wash hands
- Introduce yourself and ask permission
- Any pain?
- Position/Exposure: Lie flat, hands at sides, blanket to cover legs
- Examine from the patient's **right**

Inspection - General

- Stand back and look carefully, make this obvious to the examiner or state 'I am just going to have a look from the end of the bed'
- Look for 3 main things from end of the bed
 - o Chronic liver disease (spider naevi, gynaecomastia, loss of hair, scratch marks, bruising)
 - o Decompensation of liver disease (ascites – distended abdomen, jaundice)
 - o Scars (hockey stick- renal transplant, multiple – could this be IBD?)
- *For extra marks: Look for underlying cause:*

OSCE-Aid Tips

Take your time to have a good look! In this station the diagnosis is often given away by careful initial inspection e.g. CLD, renal transplant etc.

Chronic liver disease	Splenomegaly	Renal transplant
<ul style="list-style-type: none"> - Tattoos (Viral hepatitis) - Needle prick marks - Skin pigmentation (haemochromatosis) - Xanthelasma (PBC) - Obese (NAFLD) 	<ul style="list-style-type: none"> - Bruising (lymphoproliferative disease) - Jaundice (haemolytic anaemia e.g. hereditary spherocytosis) 	<ul style="list-style-type: none"> - Rutherford Morrison 'Hockey stick' incision - Nephrectomy scar (on back)- polycystic kidneys - Needle prick marks on fingers (capillary glucose in diabetes) - Malar rash (SLE)

Hands

- Examine nails for clubbing (chronic liver disease, IBD, coeliac), koilonychia (spoon shaped nails in iron deficiency anaemia), leuconychia (white nails-low albumin in CLD)
- Look at **both** hands for Dupuytren's contracture, palmar erythema, spider naevi
- **Feel** both palms, early Dupuytren's may be palpable as a nodular area in the palm.
- Check for **Asterixis**: Ask the patient to 'place your arms out in front of you and cock your wrists back'. Asterixis is a coarse flapping tremor which is present in hepatic encephalopathy and thus, unlikely to be present in your exam.

Eyes

- Ask to pull down one eyelid looking for anaemia, **scleral icterus** (jaundice seen in the eye)
- Look around the eye for **xanthelasma** (Primary biliary cirrhosis, NAFLD)

Mouth

- Look briefly in the patient's mouth for
 - o Smooth tongue, angular stomatitis (iron deficiency)
 - o Aphthous ulcers (IBD)
 - o Pigmented freckles (Peutz-Jeghers syndrome)

Chest

- Inspect for:
 - o Loss of male hair distribution
 - o Gynaecomastia
 - o Spider naevi: if present **count** them: more than 5 is abnormal.
- Ask the patient to lean forward: use opportunity to examine neck and supraclavicular fossae for lymphadenopathy: examine from **behind**. Feel above the left clavicle for Virchow's node (sign of intra-abdominal malignancy)
- Inspect the back for more spider naevi and look for scars e.g. nephrectomy incision in loin.

Abdomen

Inspect

- Re-inspect more closely (this will give you time to think!). Think about what you have already found and what you would expect next. Look for
 - o Abdominal distension (ascites, constipation etc)
 - o Scars (Hockey stick: Renal transplant, Mercedes-Benz: Liver transplant, scars from laparoscopic surgery, drains etc)
 - o Caput medusae (Veins radiating from umbilicus- a sign of **portal hypertension**)
 - o Striae ('stretch marks'): May be normal but if marked could represent Cushing's syndrome (e.g. due to steroids used in IBD/renal transplant)

Superficial & Deep Palpation

- Looking at the patient's **face**, warn the patient (ask again if any pain) and gently palpate (using **the flat of your hand**) in all 9 areas, starting away from any painful area and working towards it. You are looking for evidence of pain and peritonism (guarding, rebound)
- Palpate more deeply for any masses (try to think what this might be: where is it, how does it feel (smooth, hard, craggy), is it attached to surrounding structures etc. (see 'examination of a lump')
- *If there is a 'hockey stick' incision: feel for an underlying mass (the kidney transplant).*

Liver

- Place the flat of your hand on the right lower quadrant with the index finger side of your hand towards the patient's head.
- Ask the patient to take deep breaths in and out.
- Move up the abdomen towards the right costal margin. **Feel** as the patient breaths in, **move up** as they breath out
- If there is liver enlargement you will feel the liver moving under your fingers.
- Quantify the enlargement with 'number of finger breadths' below the costal margin.
- Try to feel if it is smooth or craggy.

OSCE-Aid Tips

Peritonism is indicated by:

Rebound: Pain elicited on palpation is less severe than pain when hand rapidly removed from abdomen

Guarding: **Involuntary** tensing of abdominal musculature due to local or generalised inflammation

- **Confirm** the enlargement by **percussing** from RIF up to right costal margin. The liver will be **dull** to percussion.

Spleen

- With the same technique and starting in the right iliac fossa, slowly move **diagonally** to the left costal margin feeling for a spleen.
- Use a flat hand but the **tips of your fingers**, rather than the margin of your index finger.
- If the spleen is palpable, then it is **enlarged**.
- Features of the spleen (to distinguish from kidney):
 - o You can not get above it
 - o Dull to percussion
 - o Moves with respiration
 - o Splenic notch
- **Confirm** the enlargement but percussing in the same direction.
- If impalpable when lying flat, ask the patient to lean onto their right hand side and palpate deeply in LUQ.

OSCE-Aid Tips

In advanced cirrhosis, the liver may not be palpable as it shrinks with time- do not be disheartened!

Shifting Dullness

- Percuss from the midline to the patient's **left side** – moving left will make the next stage easier!
- If ascites is present, the resonance in the midline will be come dull laterally
- If dull, ask the patient to lean to their right side while keeping your finger in position.
- Wait 20s, then percuss. If the previously dull area is now resonant, this is **shifting dullness**, and a sign of abdominal fluid (ascites)

Kidneys

- While patient is still in position (on right side), place your left hand behind them onto their back and ask them to roll flat.
- Using your right hand palpate deeply in the mid-left side of the abdomen
- Ballot the left kidney by pressing sharply upwards with your left hand (on their back), an enlarged kidney will be palpable on balloting.
- Perform the same manoeuvre to palpate for the right kidney.

Auscultate

- **Listen for bruits:**
 - o Abdominal aortic aneurysm: just above umbilicus
 - o Renal 2.5cm above and lateral to umbilicus (renal artery stenosis)
- Bowel sounds (listen in right lower quadrant, 'over the ileocaecal valve')

Complete

'I would like to dipstick the urine, examine the external genitalia and perform a digital rectal examination'.

NB This is the standard suggested completion sentence. This can be adapted if necessary to the condition in question. For example, for a renal transplant you may wish to ask to 'dip the urine for protein, check the blood glucose and to know the blood pressure.'