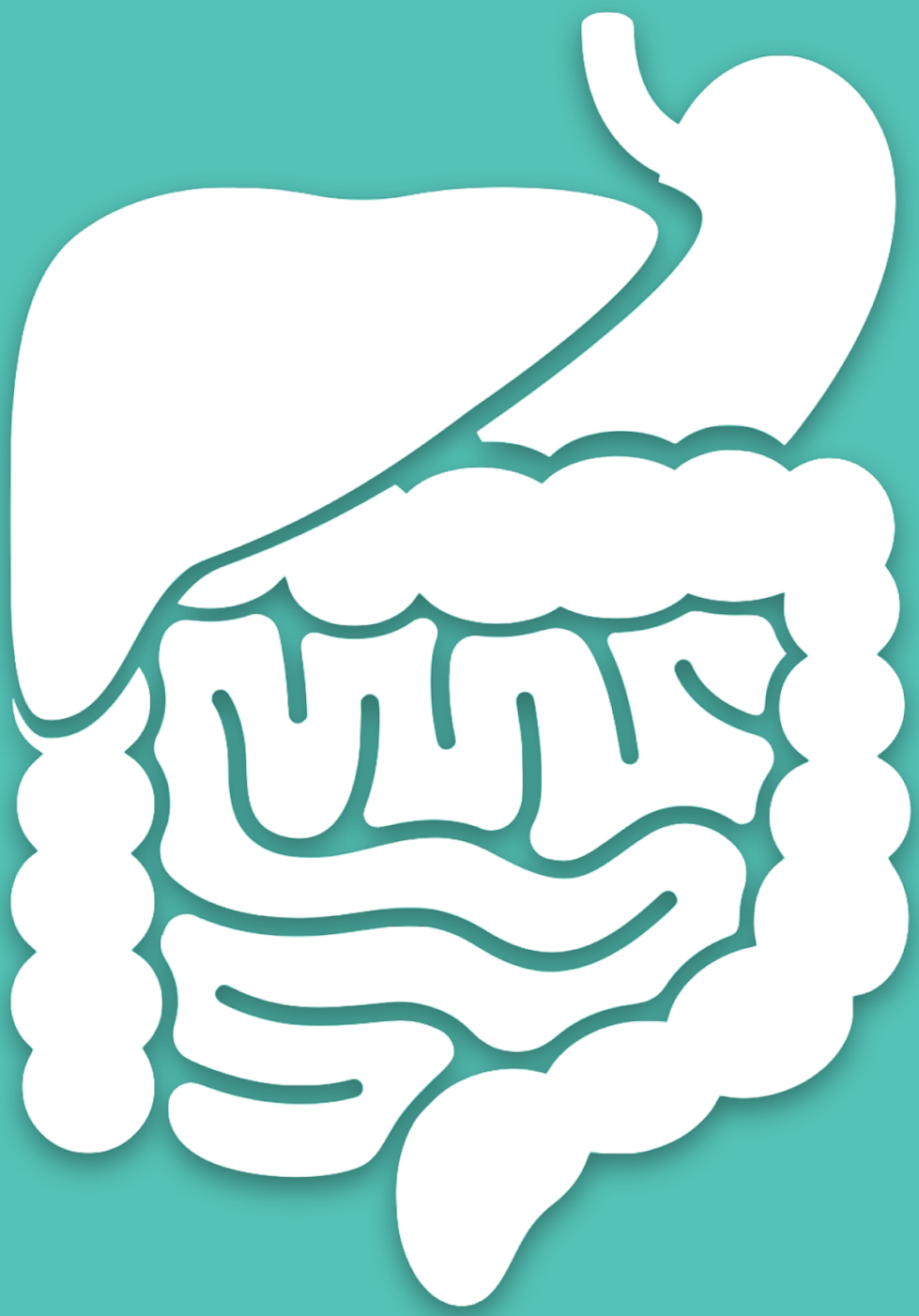
ABDOMINAL EXAMINATION



Nick Smith

ABDOMINAL EXAMINATION

INTRODUCTION

Hand washing
- Essential to prevent cross infection
- Clean stethoscope

Don appropriate PPE

Introduce yourself
- Use your full name and explain who you are

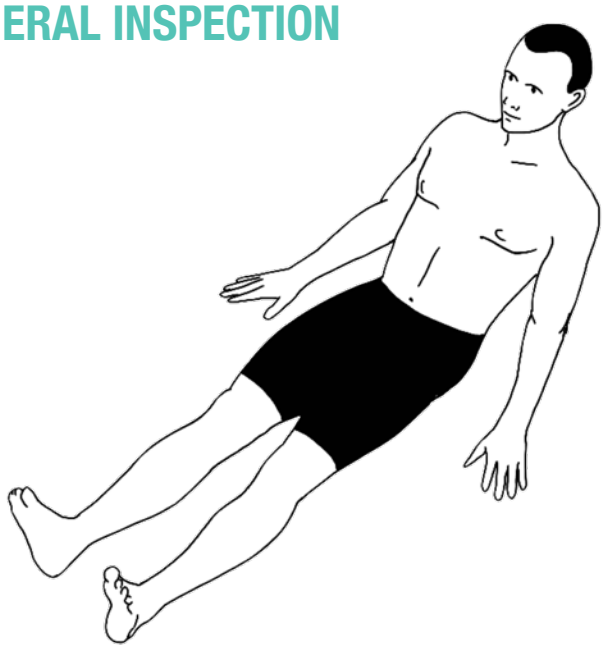
Confirm you have the correct patient
- Their name and date of birth
- Also how do they like to be addressed

Explain
- Explain that because of their condition that you would like to examine their heart
- Explain in plain English what that will involve

Consent
- Gain their consent to do this

Chaperone
- Consider whether you need a chaperone for this examination

GENERAL INSPECTION



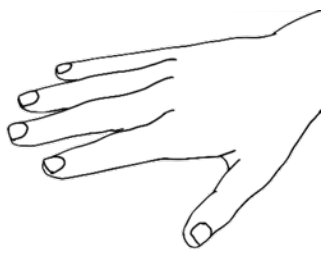
Position
- sat up on couch to begin
- supine when examining abdomen

Exposure
- Can leave top on initially
- uncovered from the pubic symphysis upwards prior to inspection of the abdomen

Surrounding area
- Drips, medication, drinks, drains

Patient
- Body habitus
- well/unwell
- scars
- distended abdomen
- signs of pain/distress

NAILS & HANDS



NAILS

Clubbing
- loss of nail bed angle (look for the diamond between each pair of fingers)
- inflammatory bowel disease, cirrhosis

Leuconychia
- whitening of nail beds due to low albumin
- malnutrition, malabsorption chronic liver disease, nephrotic syndrome

Koilonychia
- spooning of the nails
- iron deficiency (congenital or chronic)

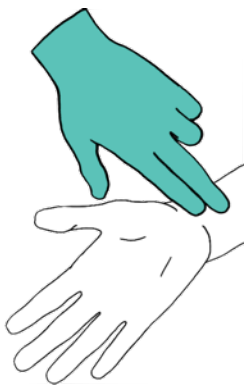
HANDS

Xanthomata
- raised yellow lesions on tendons
- hyperlipidaemia through primary biliary cirrhosis

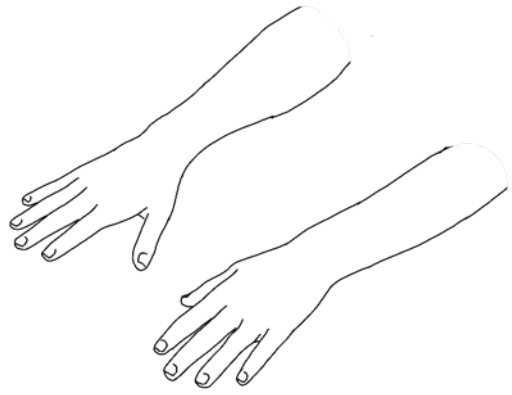
Dupuytren's contracture
- thickening and contracture of palmar fascia
- alcoholic liver disease (or manual work or familial)

Palmar erythema
- blotchy reddening of the palms
- chronic liver disease (and many other non-abdo related causes)

ARMS



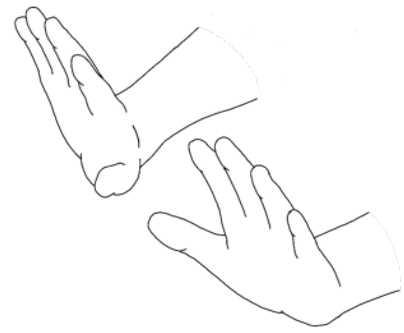
Pulse
- rate and rhythm
- look for AV fistula



Bruising
- chronic liver disease may affect clotting

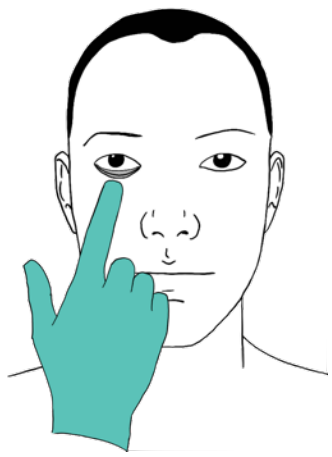
Scratch marks
- ?raised urea

Track marks & homemade tattoos
- hepatitis risk



Flapping tremor
- If encephalopathy suspected.
- arms straight out in front, wrists cocked back, fingers, spread for >15 sec - jerky, irregular flexion/extension (may be subtle)
- encephalopathy due to liver failure

HEAD & NECK

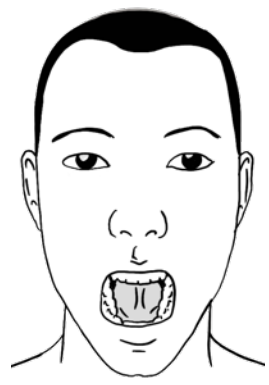


EYES

Yellowing of sclera
- jaundice

Conjuntival pallor
- anaemia

Corneal arcus & Xanthelasma
- yellow ring overlying the iris (only significant in under 50's) & yellow raised lesions around the eyes
- hyperlipidaemia

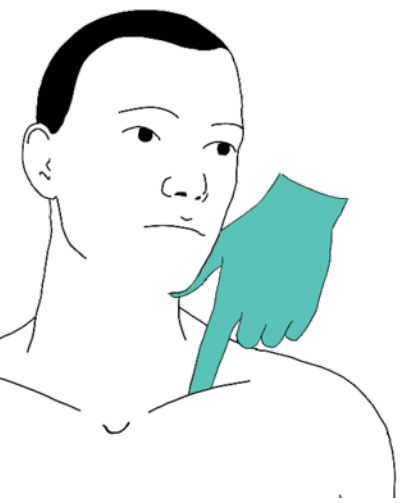


MOUTH

Angular stomatitis & Glossitis
- reddening and inflammation at the sides of the mouth & erythematous swelling of the tongue
- iron, folate, B12 deficiencies

Ulcers
- coeliac, inflammatory bowel disease, iron deficiency

Foector hepaticus
- musty, sweet breath
- liver failure



NECK

Virchow's node
- left supraclavicular node
- ask patient to turn and tilt their head slightly to the left to relax the muscles
- gastric cancer

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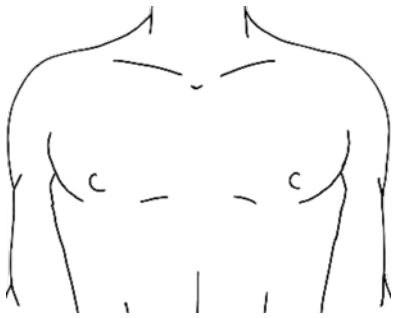
INSPECTION



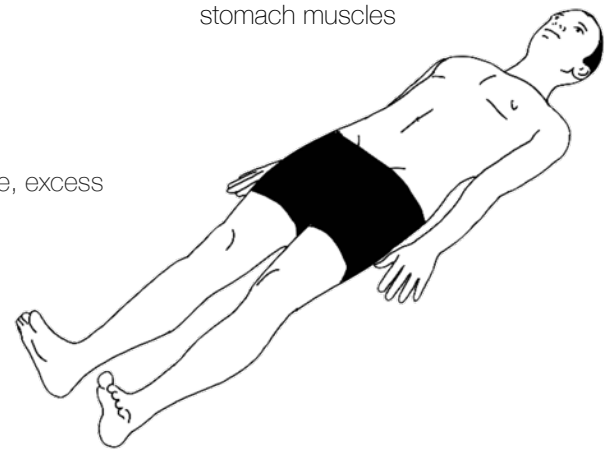
CHEST

Gynaecomastia (male only!)
- alcoholic liver disease
- drugs: several but include DISCO
  - digoxin
  - isoniazid
  - spironolactone
  - cimetidine
  - oestrogens

More than 5 spider naevi
- chronic liver disease, excess oestrogen

POSITION

Lay patient flat where possible, hands by their side, head supported by pillow to relax stomach muscles



ABDOMEN

Pulsation
- aorta
- ?AAA

Distention
- 6 F's
  - fat
  - fluid
  - flatus
  - faeces
  - foetus
  - f***ing big mass

Everted umbilicus (with distention)
- ?ascites

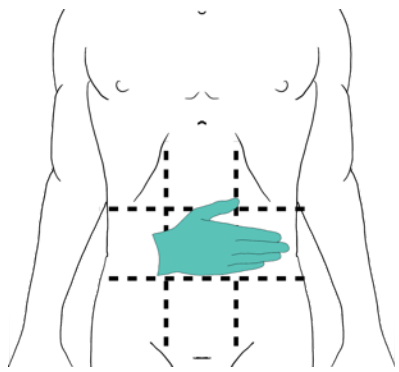
Distended abdominal veins
- portal hypertension

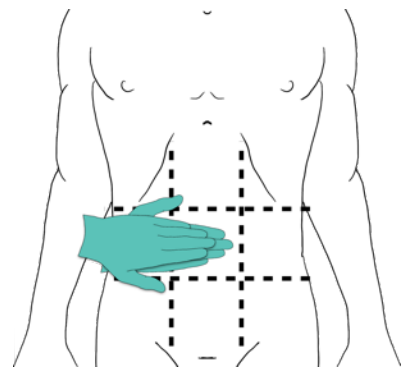
Hernias

Scars & stomas

PALPATION

Ideally at same level as abdomen so you avoid poking your fingers in to them

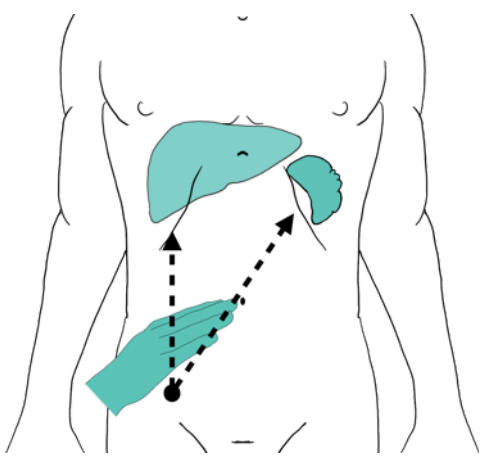




Light palpation of 9 areas
- Start furthest away from any painful area
- "let me know if I cause you any discomfort"
- gently flex your fingers at the metacarpophalangeal joints into the abdomen
- observe patient's face throughout
- if pain is present, is it:
  - as you press down or
  - when you release or painful to percussion (rebound tenderness)
  - look for involuntary tension of abdominal muscles (guarding)

Deep palpation of 9 areas
- Feeling for masses or structural abnormalities
- describe as any other mass:
- location, size, shape, surface, constancy, mobility, movement (with respiration), tenderness, pulsatile

PALPATION (ORGANOMEGALY)



LIVER
- Right Iliac Fossa to Right costal margin, flat of hand, index finger aligned with right costal margin
  - "Take deep breaths in and out"
  - feel for liver edge on inspiration
- Continue to move up 1-2cm at a time until liver edge is felt (or not)
  - how many cm below costal margin?
  - is it smooth or irregular?
  - is it tender?
  - is it pulsatile?
- Multiple cause of enlarged liver including:
  - infective
  - neoplastic
  - cirrhotic
  - metabolic
  - toxins

SPLEEN
- Right Iliac Fossa to Left costal margin
- same technique as liver
  - may be able to palpate notch on inferior edge of spleen to differentiate between it and other masses
  - roll patient on to right side as may be able to ballot the spleen
- causes of splenomegaly essentially same as liver
-

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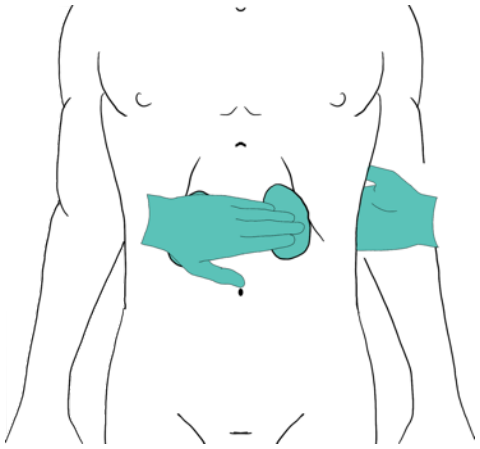
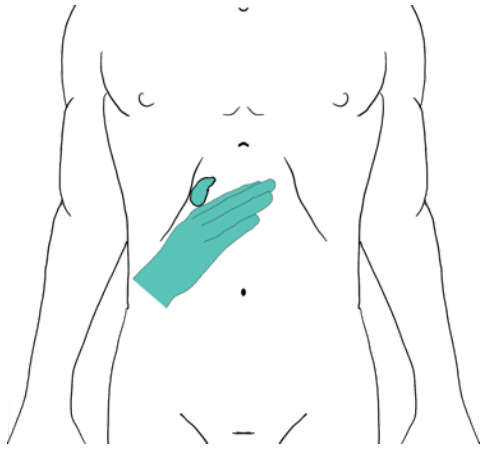
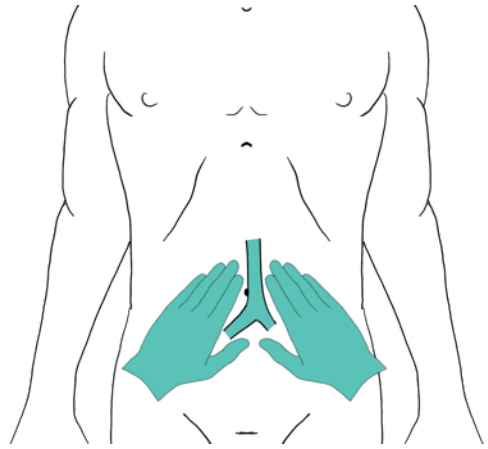
PALPATION (continued)



KIDNEYS
- palpate each kidney in turn
  - one hand behind back below lower ribs, other hand over upper quadrant
  - Gently but firmly push hands together on expiration
  - Ask patient to breath in deeply & feel for lower pole of kidney moving between your hands

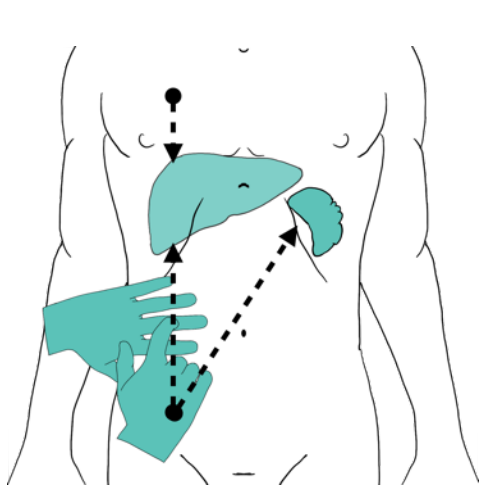


GALLBLADDER
- Murphy's sign
  - pain on deep inspiration on palpation in the right upper quadrant
  - ?cholecystitis



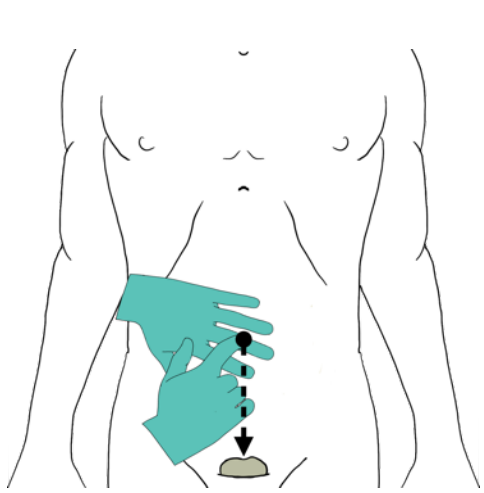
ABDOMINAL AORTIC ANEURYSM
- Palpate just above the umbilicus
- One hand either side of where the aorta sits
- Feel for a pulsation
  - Whilst it is normal to feel a pulsation in a person of normal body habitus, a pulsatile mass that expands sideway may indicate a AAA

PERCUSSION

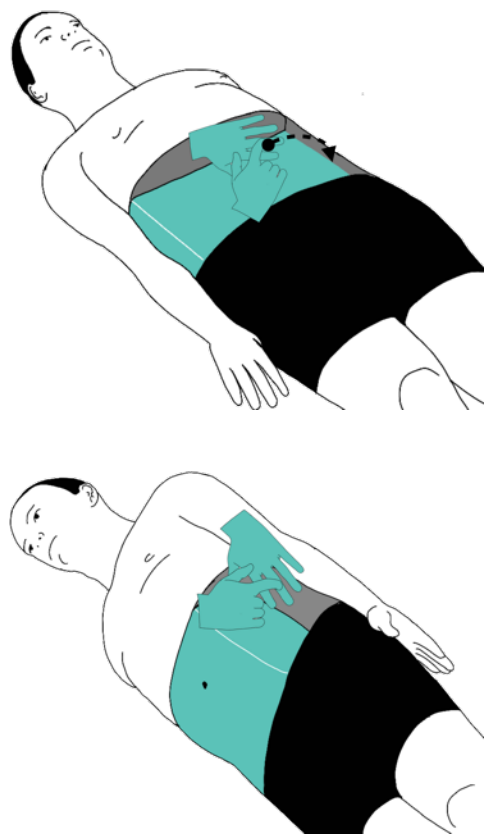


LIVER
- start at the right iliac fossa and percuss upwards in the midclavicular line
- the percussion note will become duller over the lower border of the liver
- the percuss down from the nipple line to find the upper border

Spleen
- from right iliac fossa to left costal margin
- similar technique as liver



BLADDER
- only needed if mass palpated in supra pubic area
- percuss down from umbilicus
  - dull = bladder
  - resonant = distended bowel



SHIFTING DULLNESS

only needed if ascites suspected
- percuss from midline towards left flank listening for the first point of dullness (this maybe the level of the ascitic fluid)
- Leave your finger at this point and roll the patient on to their right side
- leave for 10-30 sec then re-percuss this point
- If this point is now tympanic then ascites is present (ascitic fluid will have moved down with gravity)

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AUSCULTATION

Bowel sounds

listen just below umbilicus

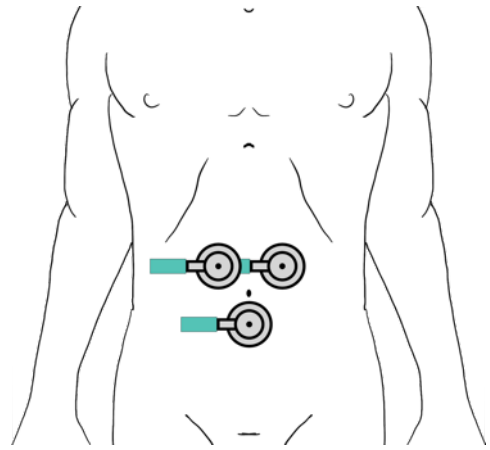
- low pitched intermittent gurgling
  - normal
- tinkling/high pitched
  - partial or total obstruction
- loud low pitched (borborygmus)
  - diarrhoeal or abnormal peristalsis
- absent *(listen for 2 min before declaring absent)*
  - paralytic ileus, peritonitis

Renal bruits

- above and either side of umbilicus

Liver bruits

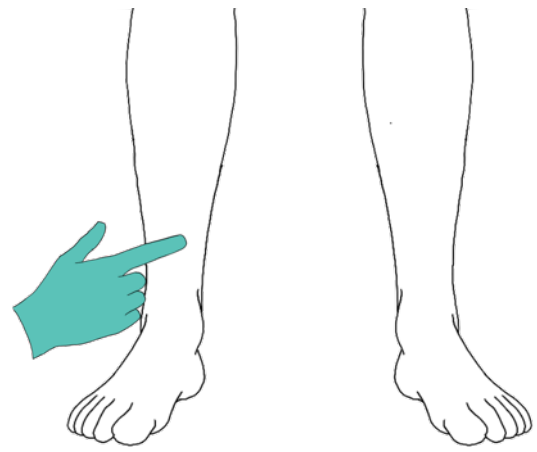
- only needed if enlarged liver



OEDEMA

Pedal Oedema

- Press in to shins for 5 seconds and look for indentation
- not always visible so run fingers over it too
- liver or kidney failure, hypoalbuminemia



FINISH

FINISH

- Thank the patient
- Tell them you have finished
- Invite the patient to dress (do they need help?)
- Do they have any questions?
- Doff PPE in the appropriate area
- Wash your hands

- What else should you examine?
- What are your differentials?
- What investigations should you order?
- What medications should you start (or stop/adjust)?
- Who should you call?

...AND WHY?

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