

A Generalists' Guide To Bowel Pathology

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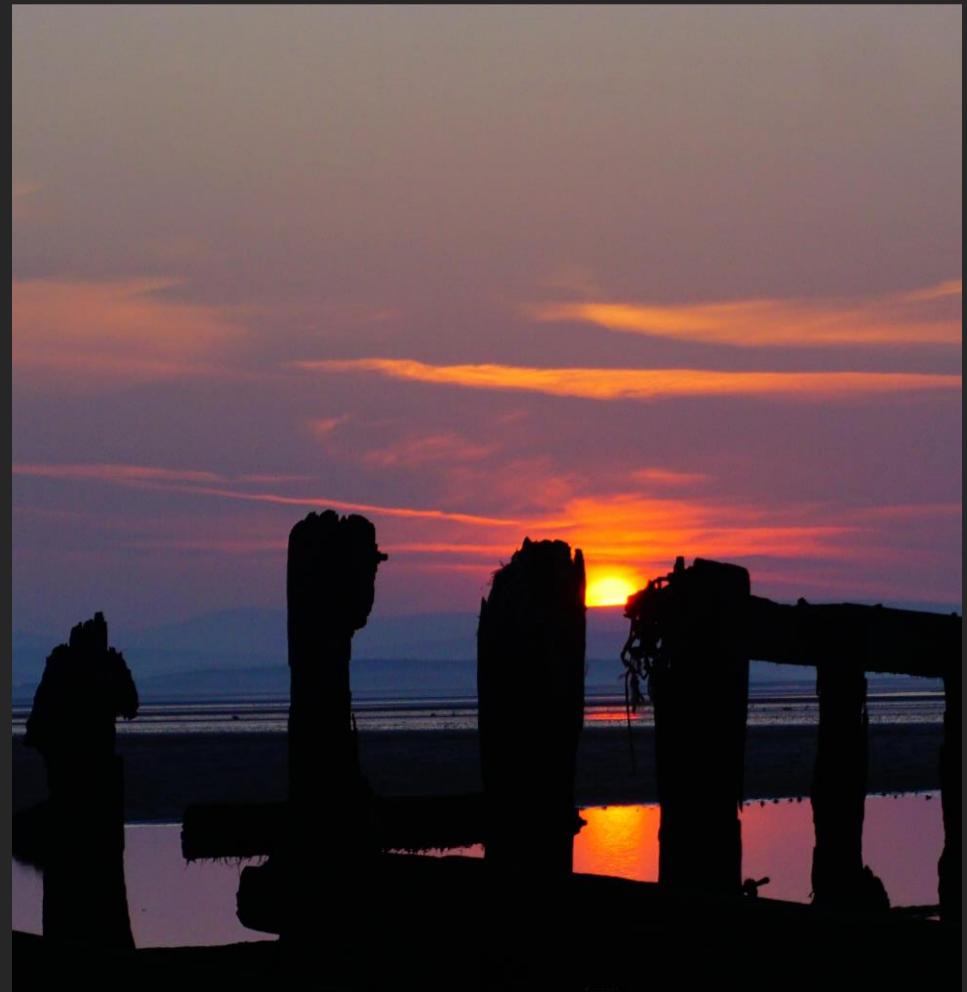
Disclosures

Speaker fees - Canon Medical
Systems/Janssen /Abbvie/Tillots
/Advisory Lilly pharma.

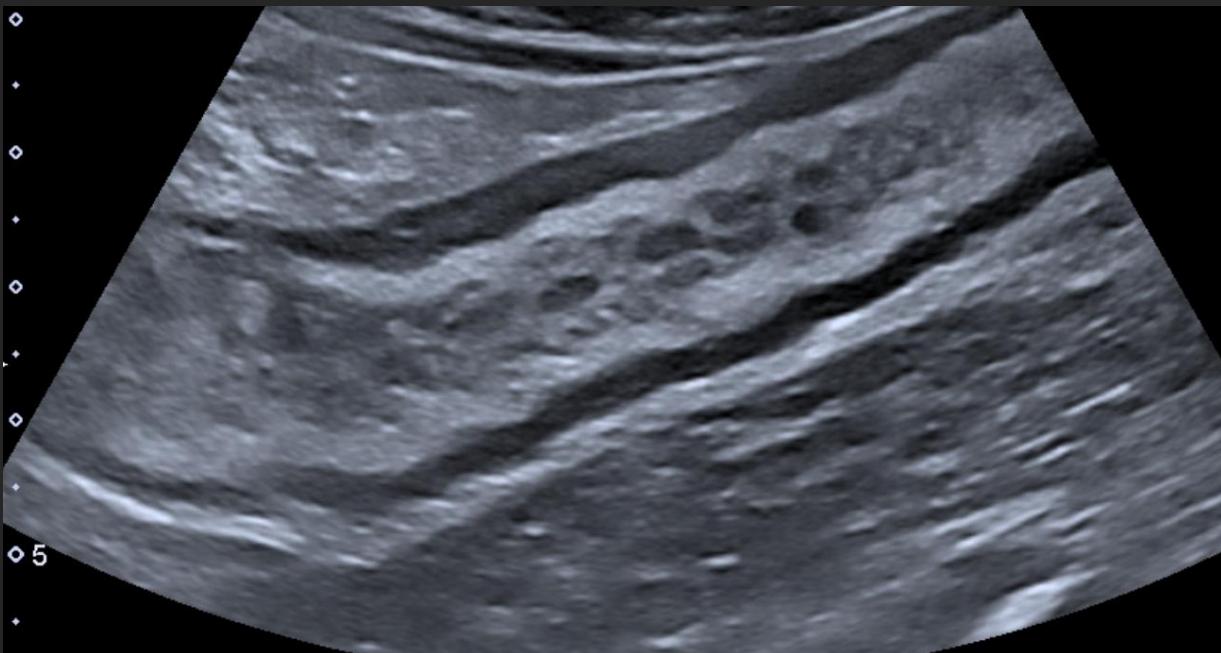


Rules

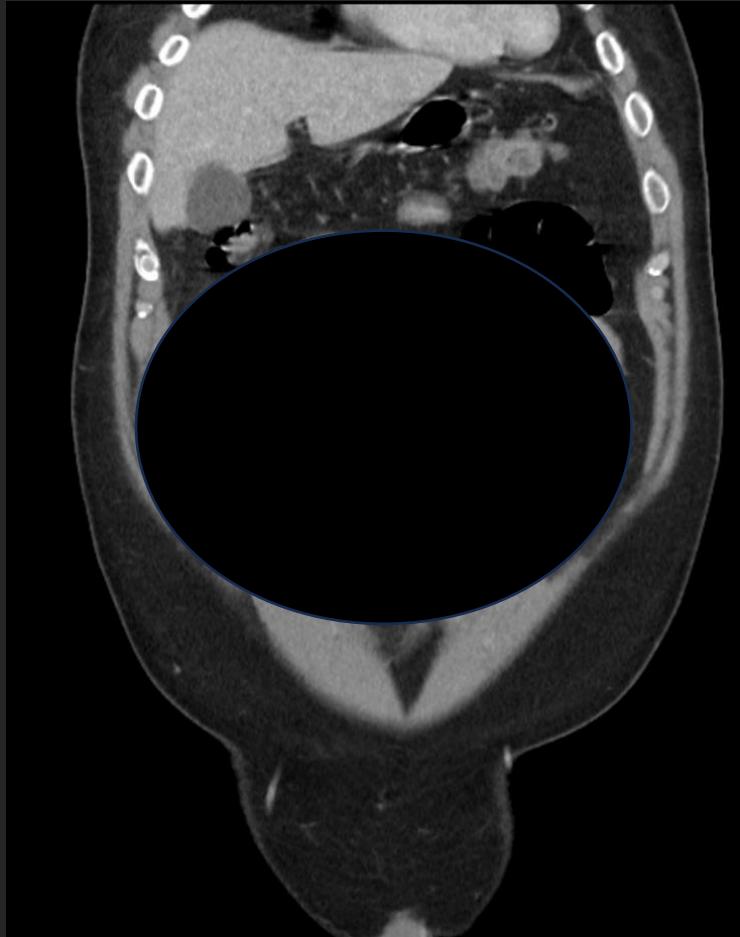
1. Scan it
2. Identify it
3. Interpret it



Bowel looks abnormal- recommend CT.....



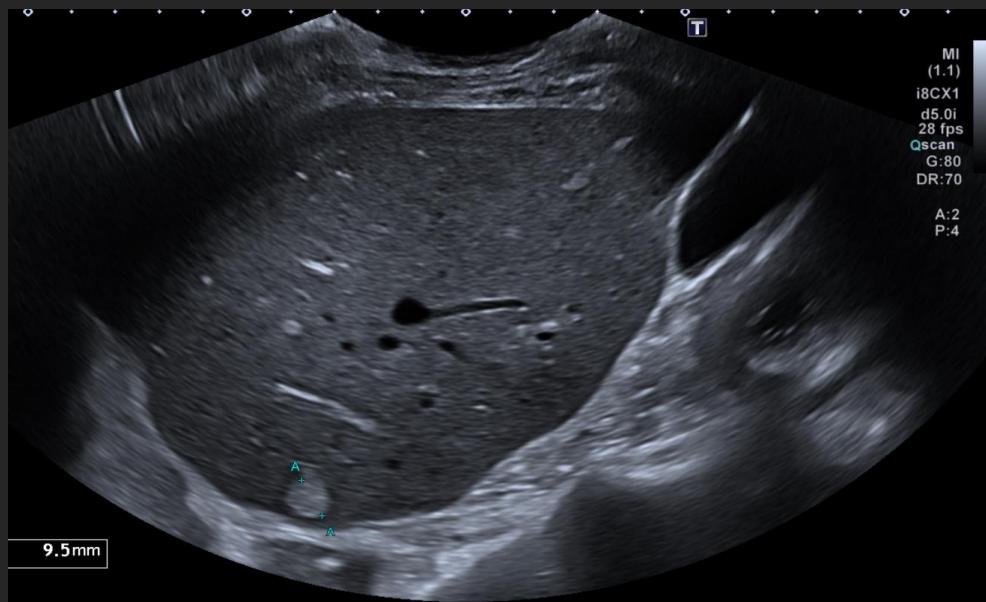
Scan it.....

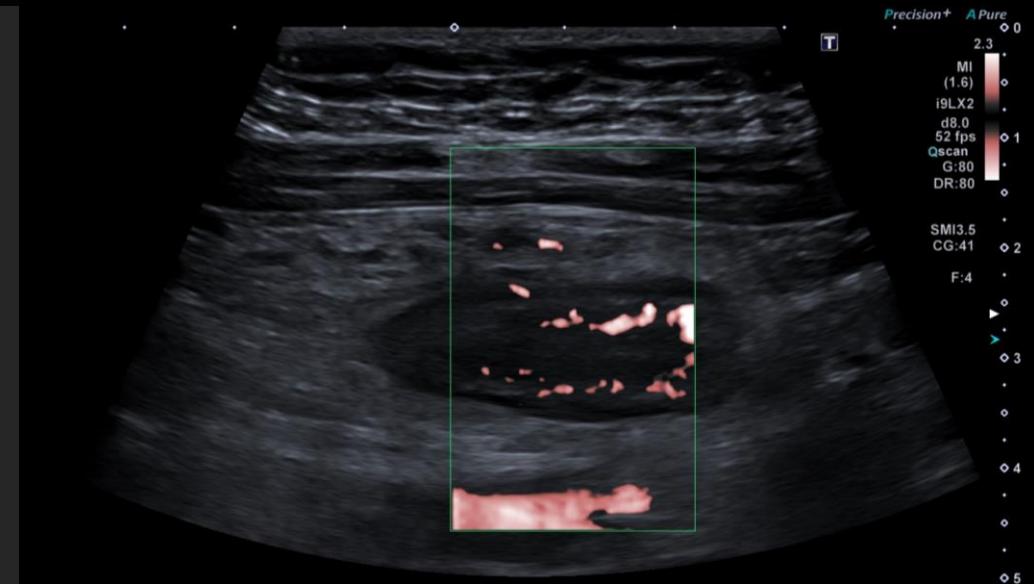
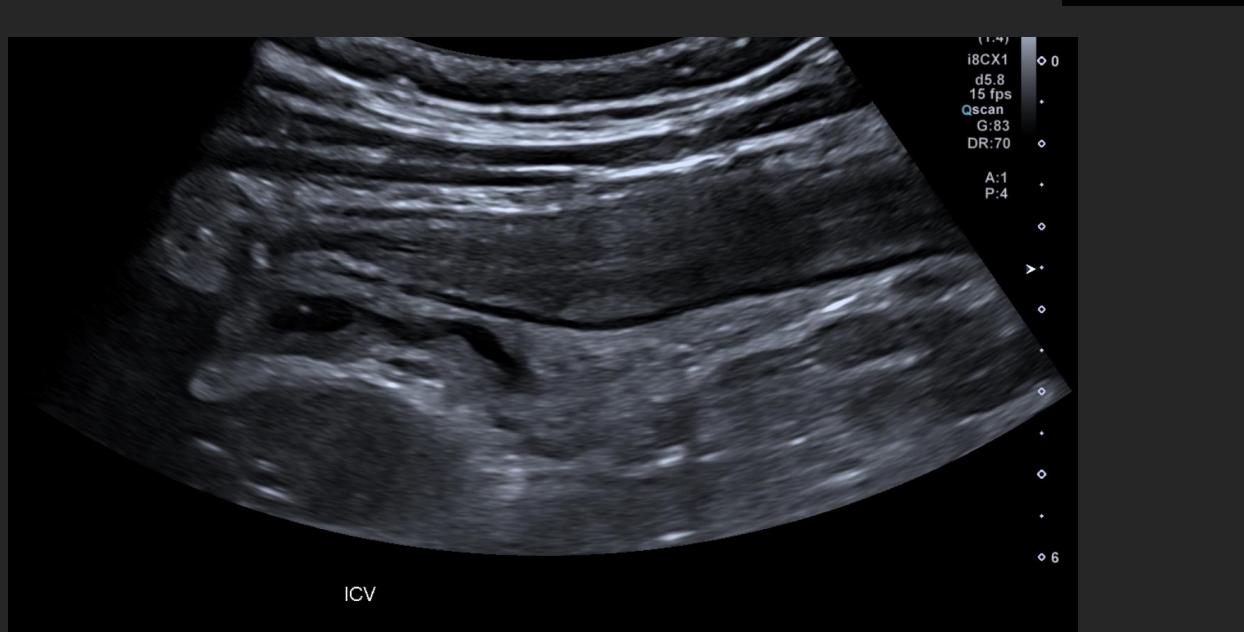


Clinical Details:

tiredness. wt loss. change in bowel habit. abdo tender L side. pain intermittent L side abdo and some vomiting. for USS urgent to assess for cause please. thanks

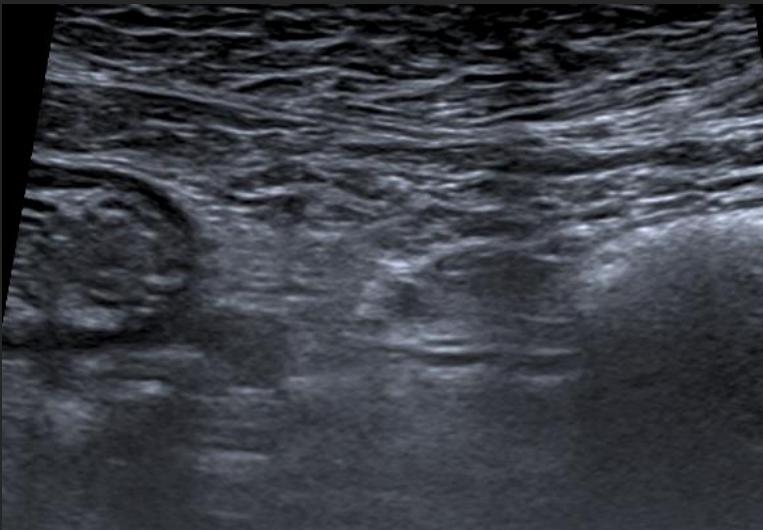
Findings: There is a 9.5 mm well-circumscribed solid brightly echogenic focus in the right lobe of liver. This appearance is consistent with a haemangioma. The liver appears otherwise normal. No abnormality seen in the gallbladder and biliary tree, pancreas, spleen and both kidneys. Normal aorta and IVC. The urinary bladder appears smooth walled and normal. No pelvic mass or cyst seen.





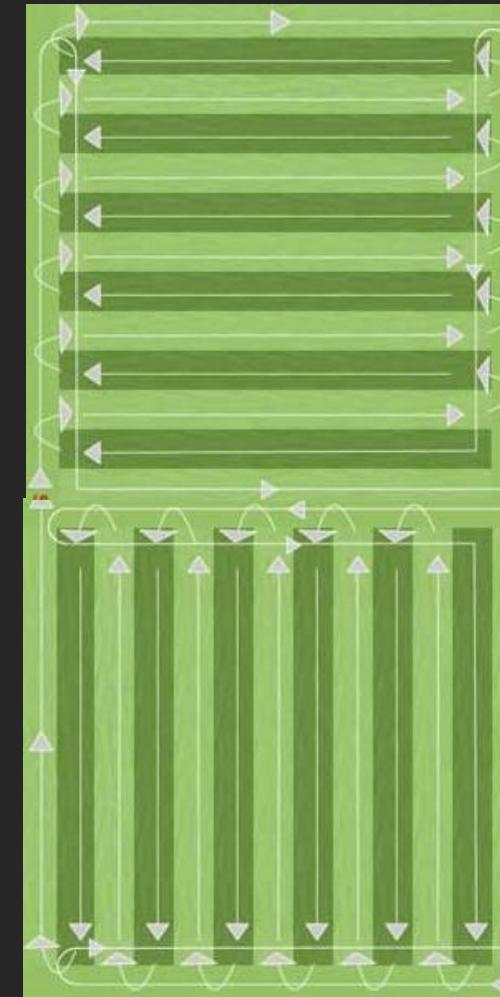
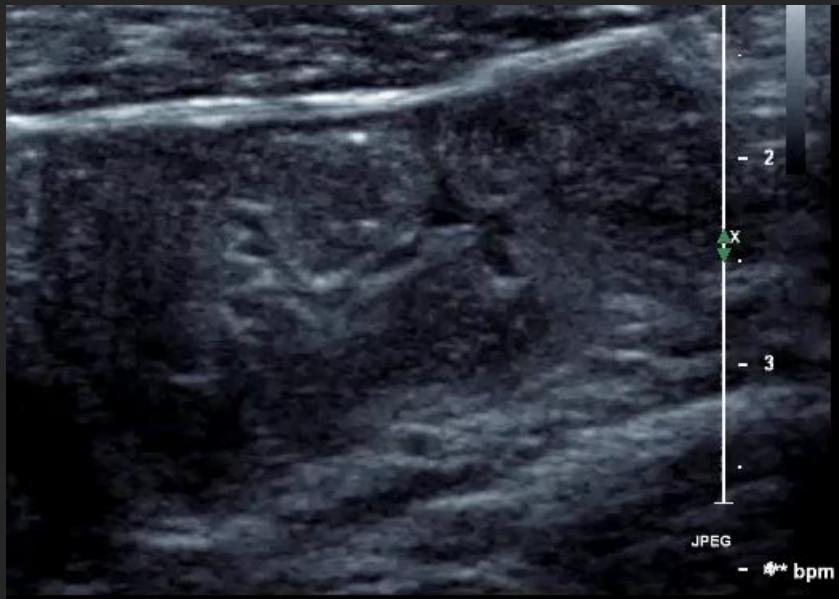
What went wrong there?

- Clinical blinkers?
- Scan technique?



Survey

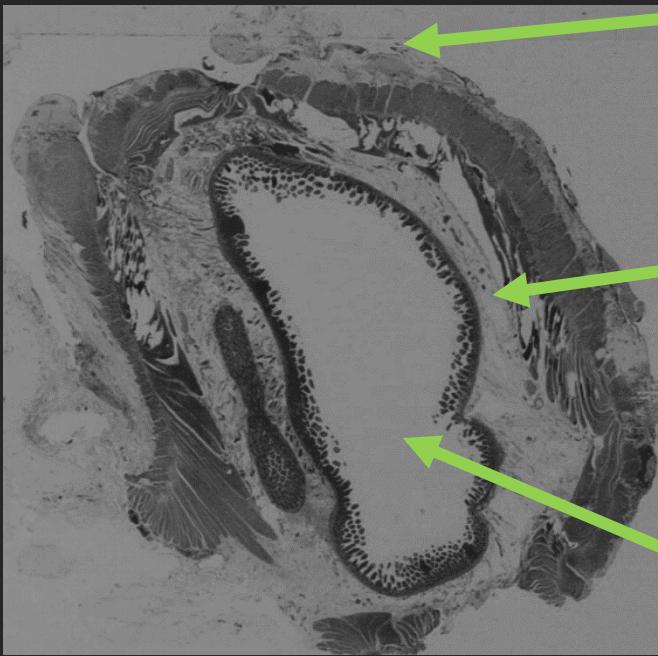
- Mow the lawn !
- Look for primary and secondary signs of disease processes



LAYERS

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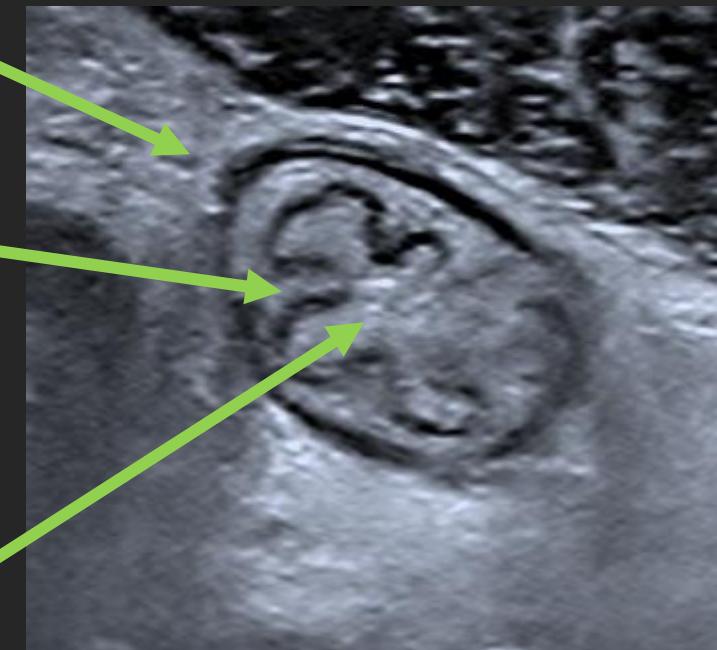
FAT



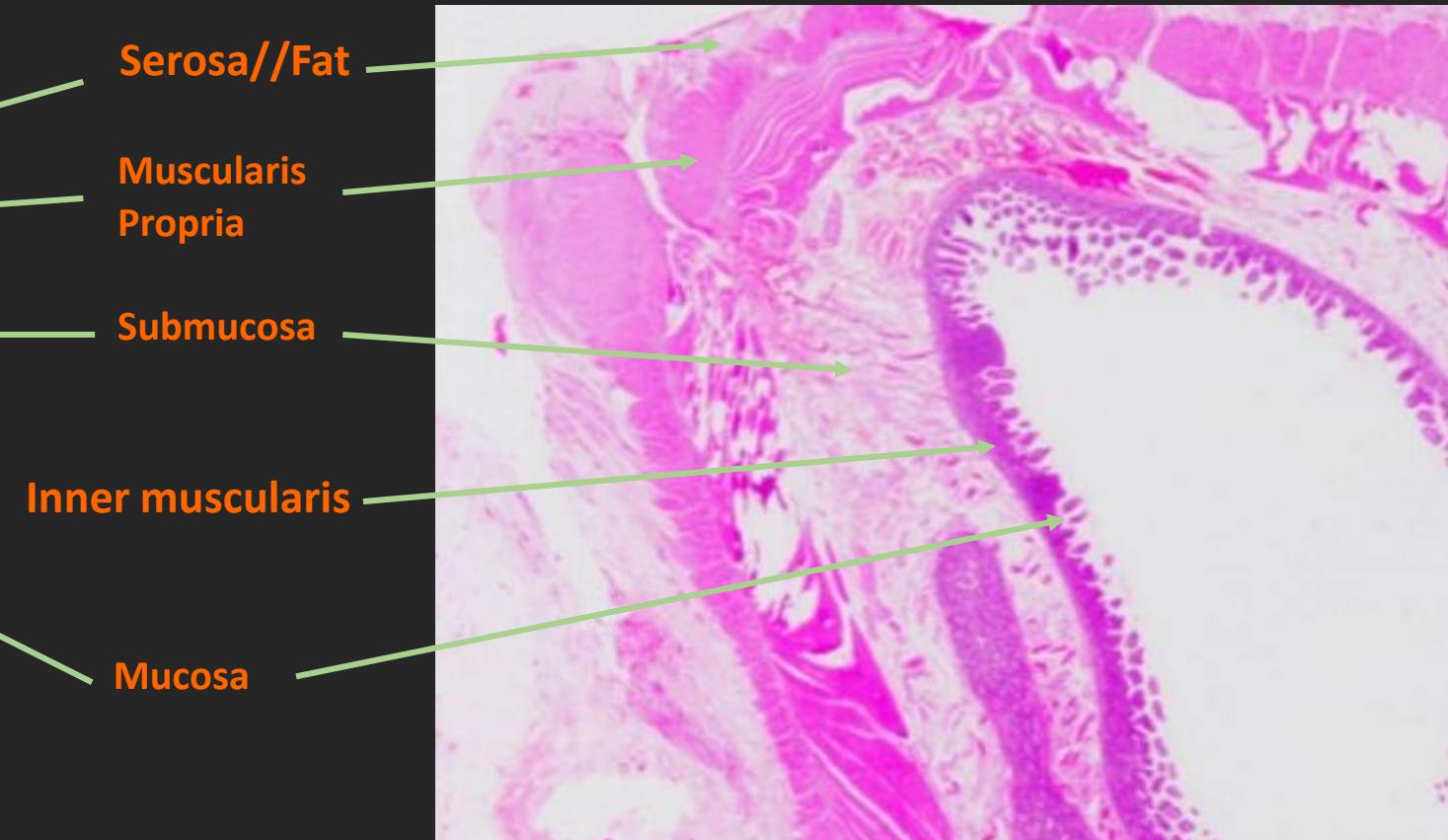
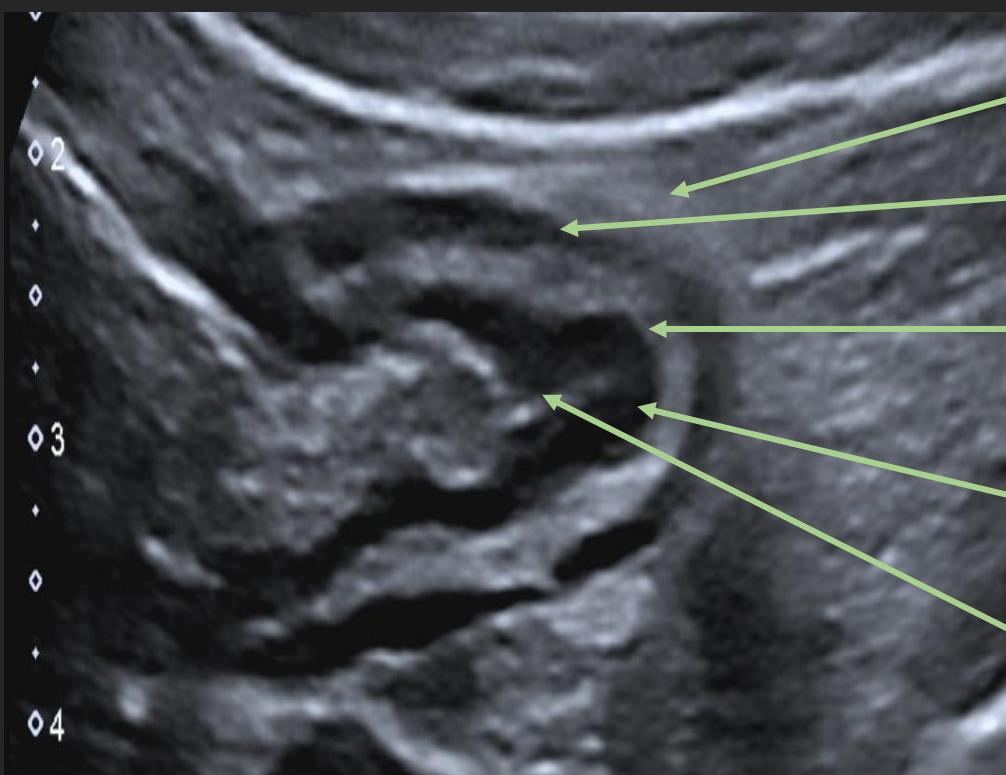
FAT

LAYERS

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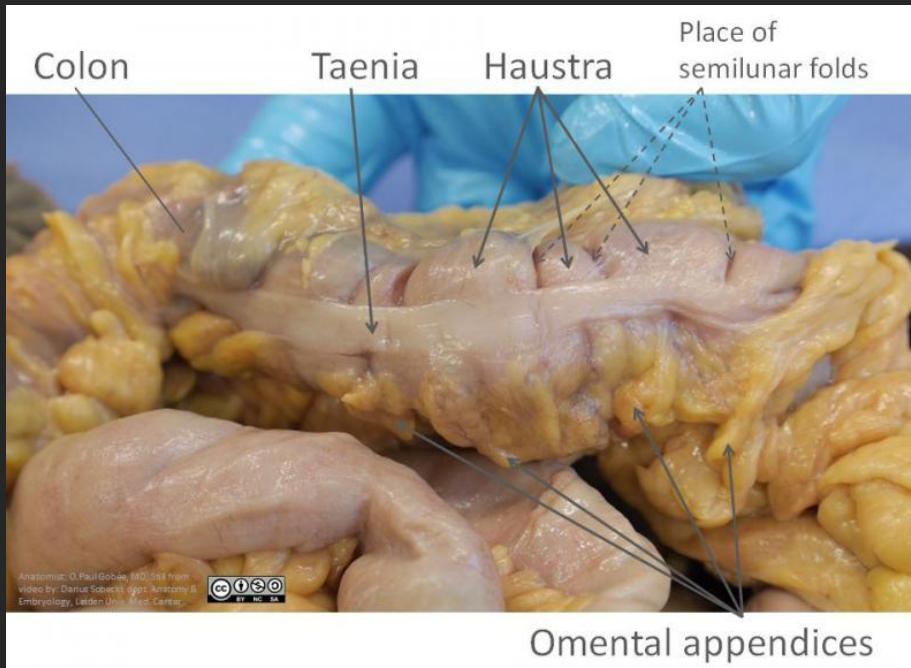
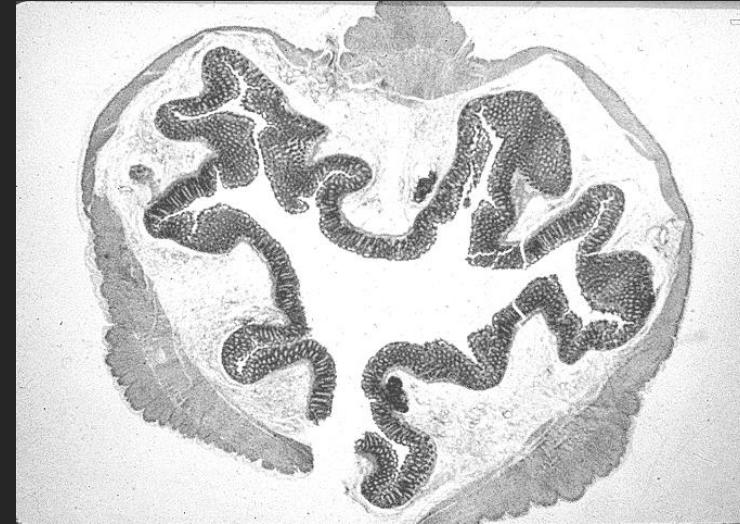


Layers

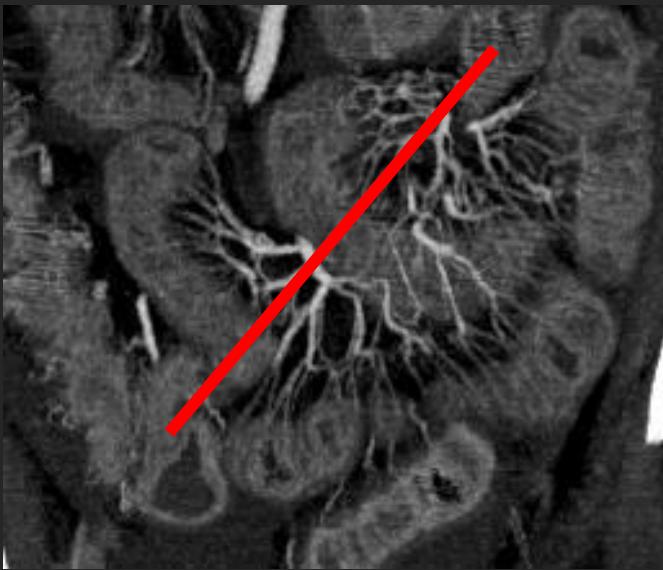
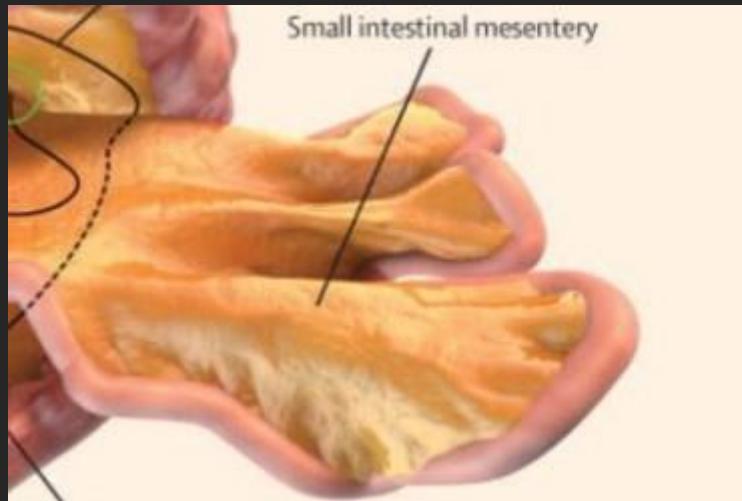


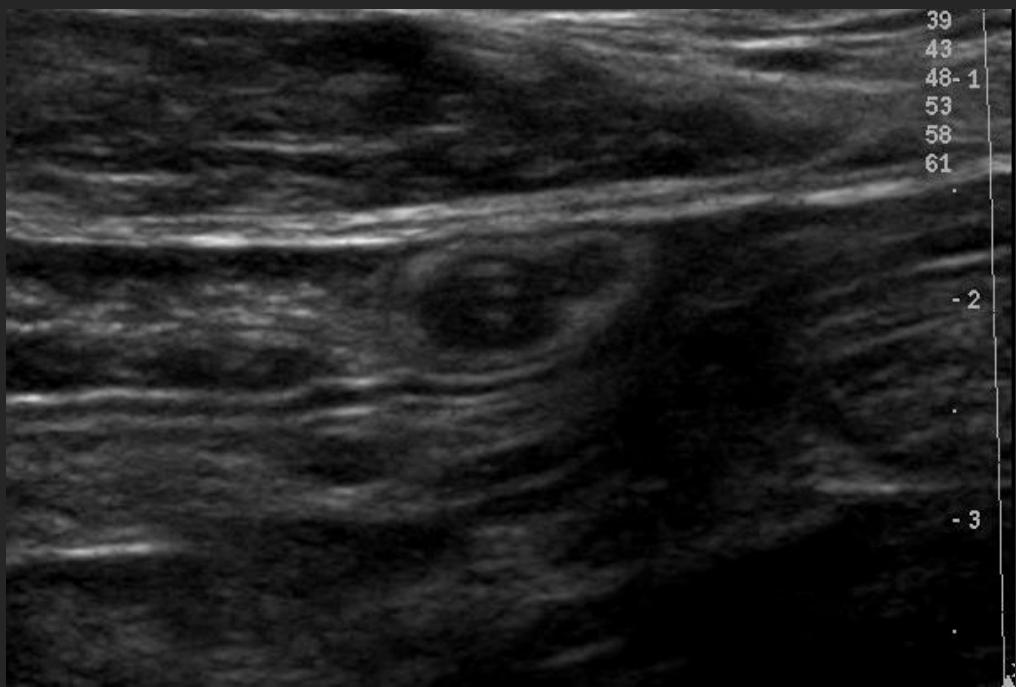
Colon

- Thicker 4mm
- Longitudinal muscle bands



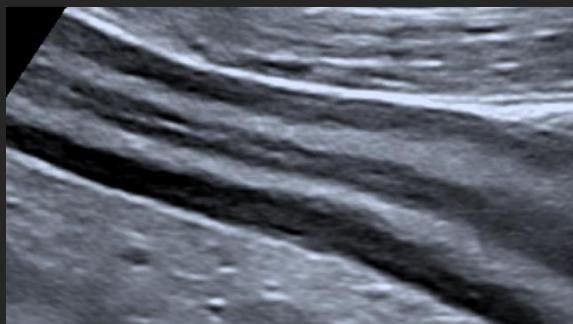
Mesentery/Fat





LAYERS

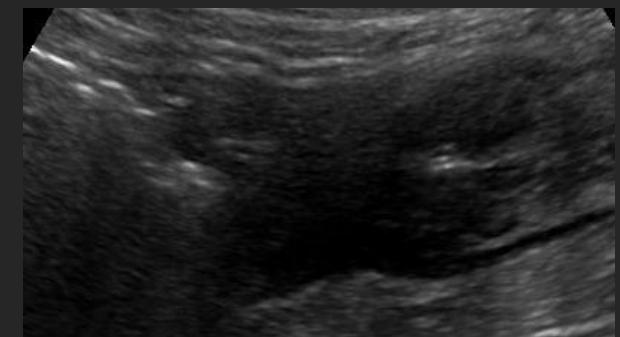
Preserved



III defined



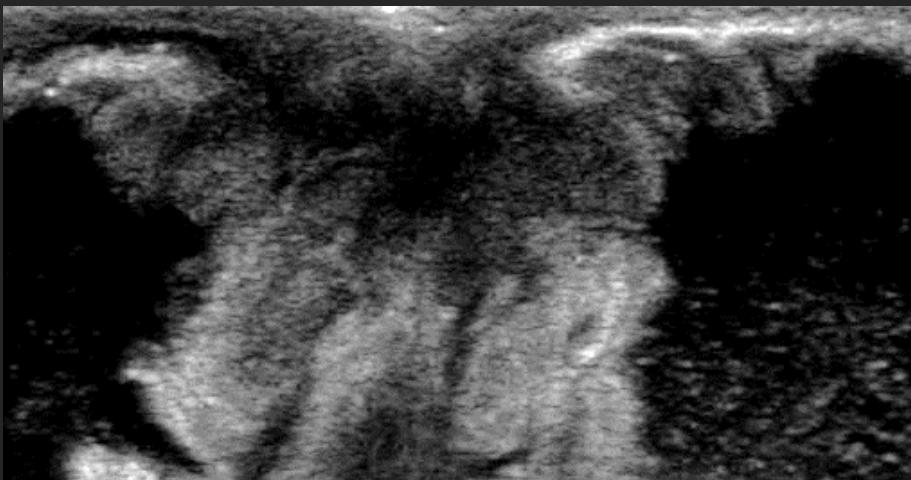
Lost



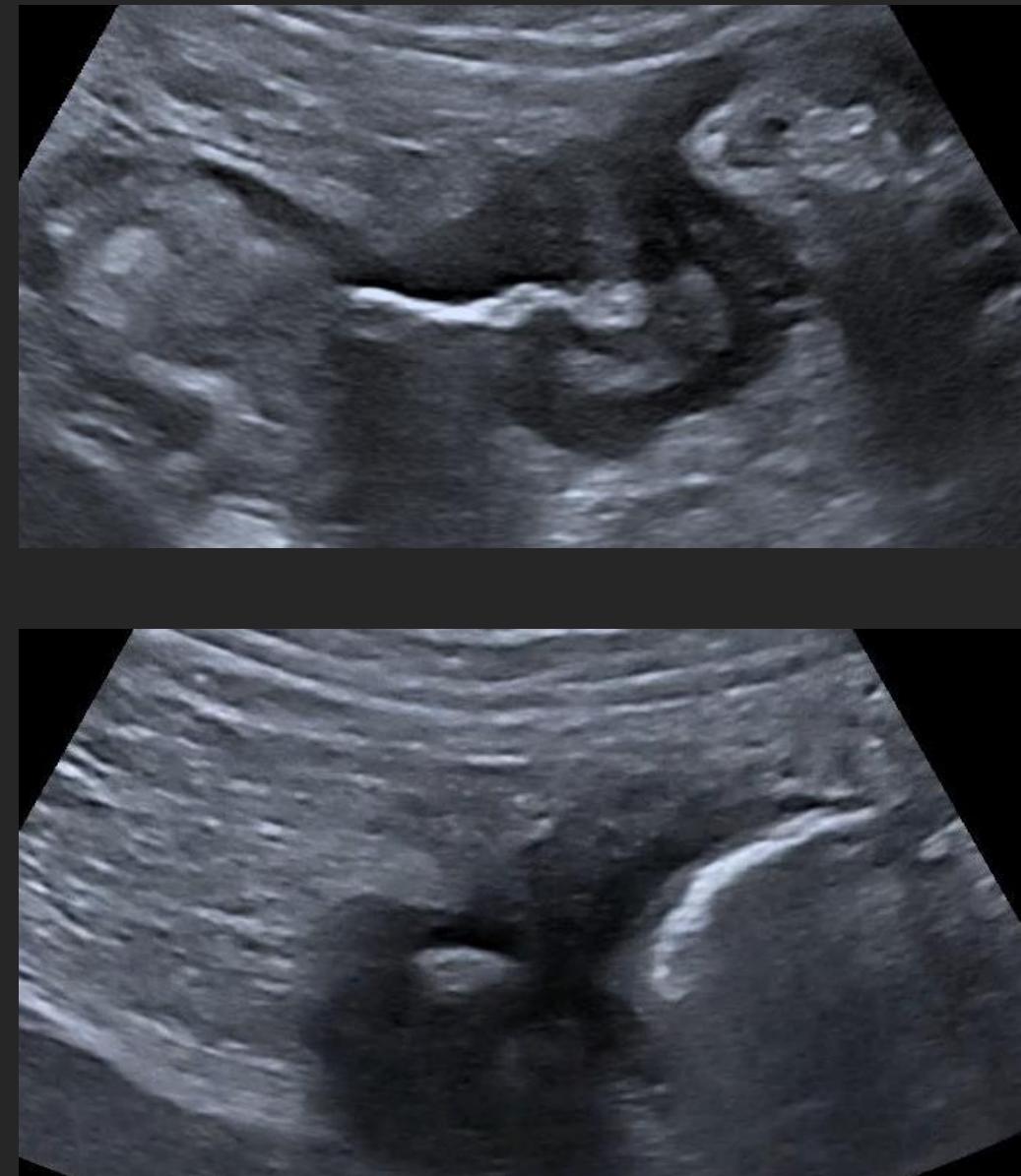
Lost

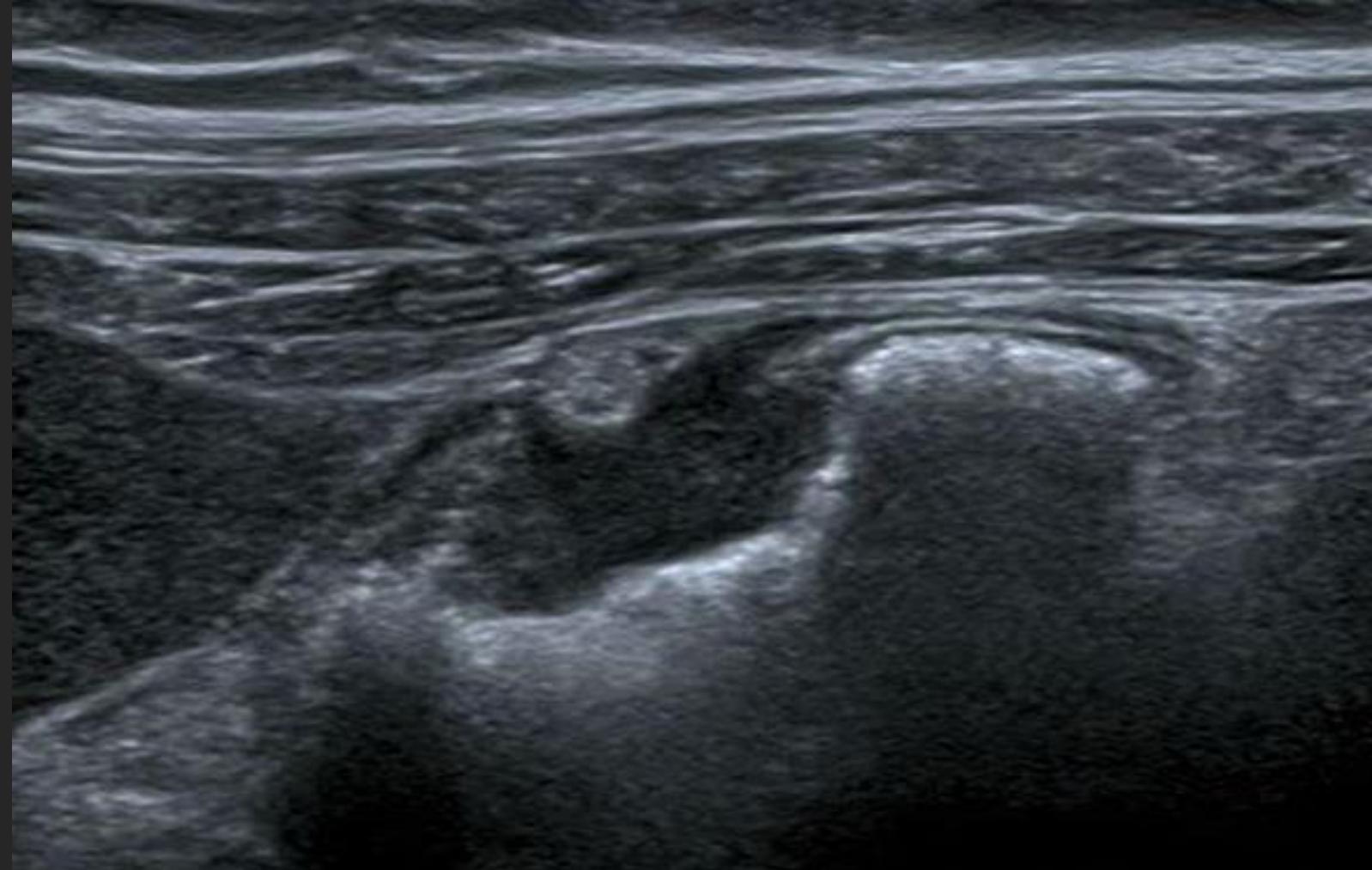
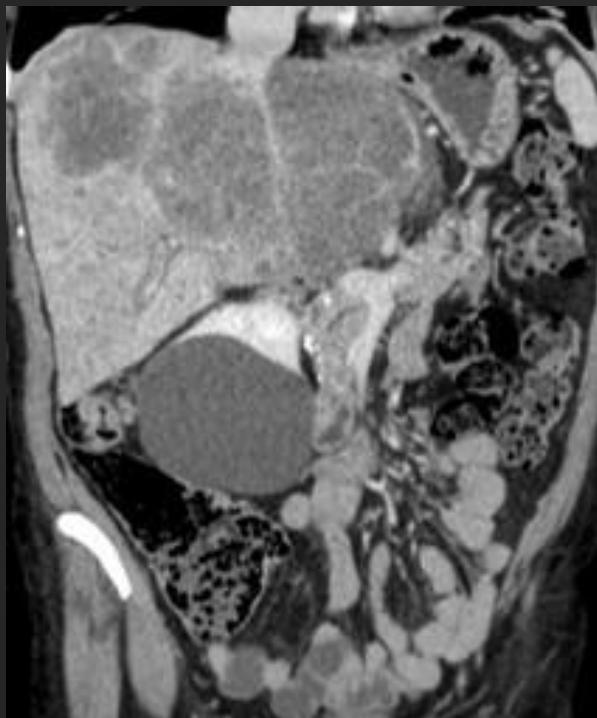


Tumours

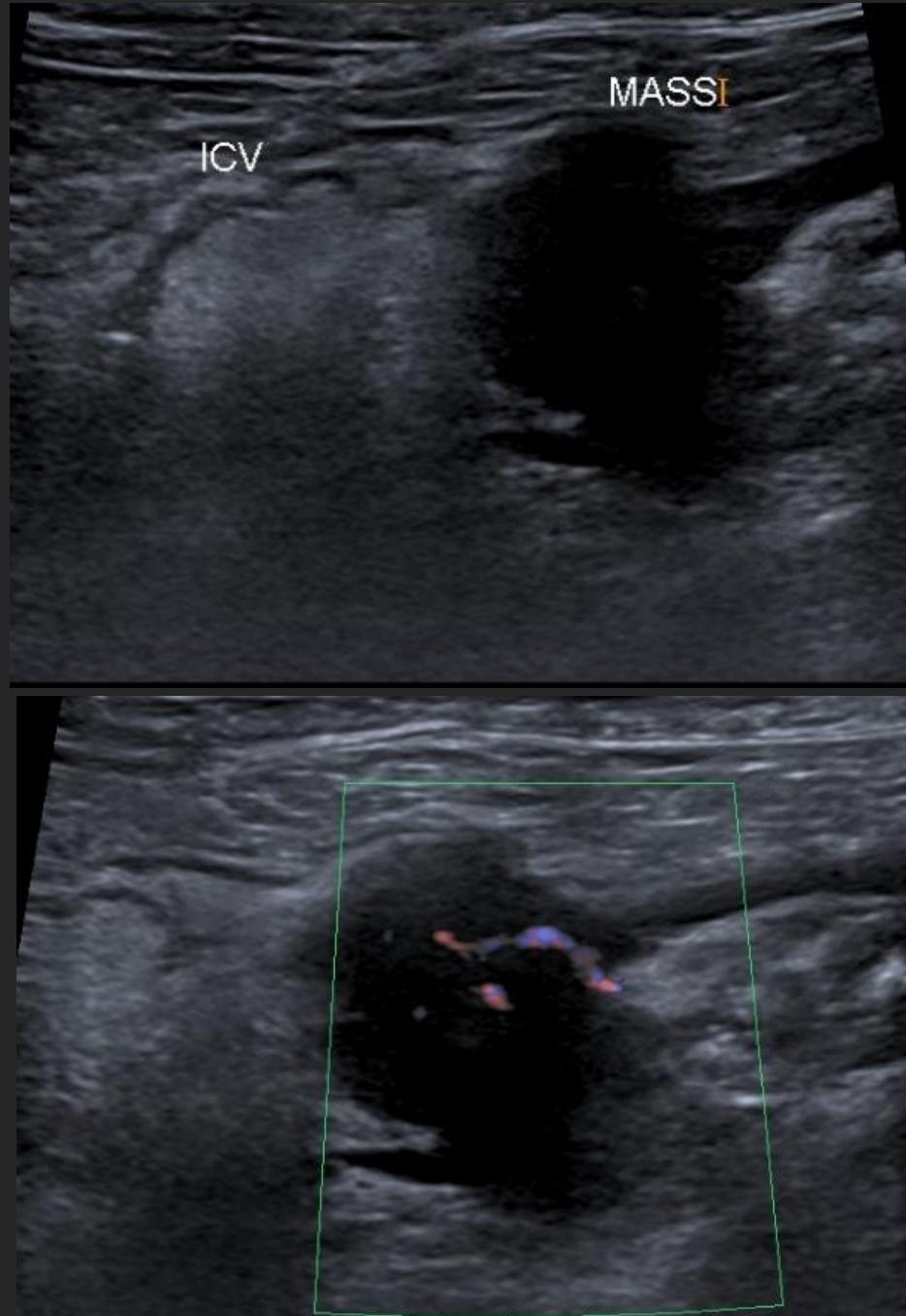
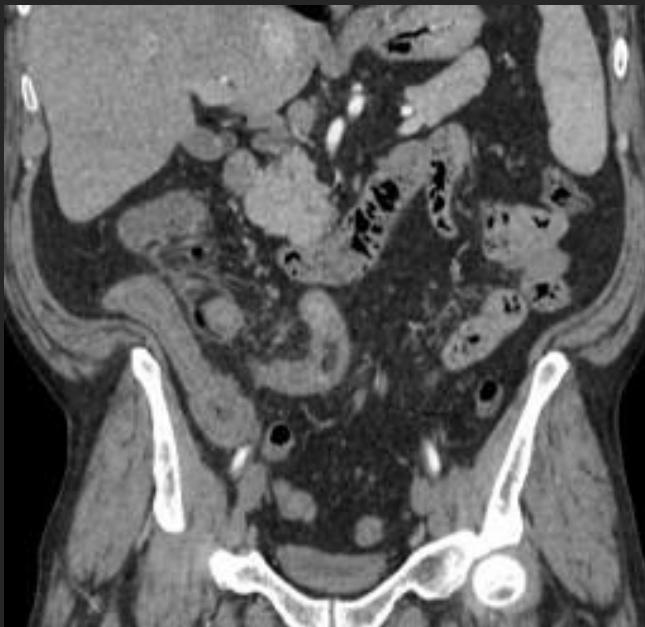


Colonic Tumours





Small Bowel



Lost

Necrosis



Fibrosis



LAYERS



Preserved

IBD

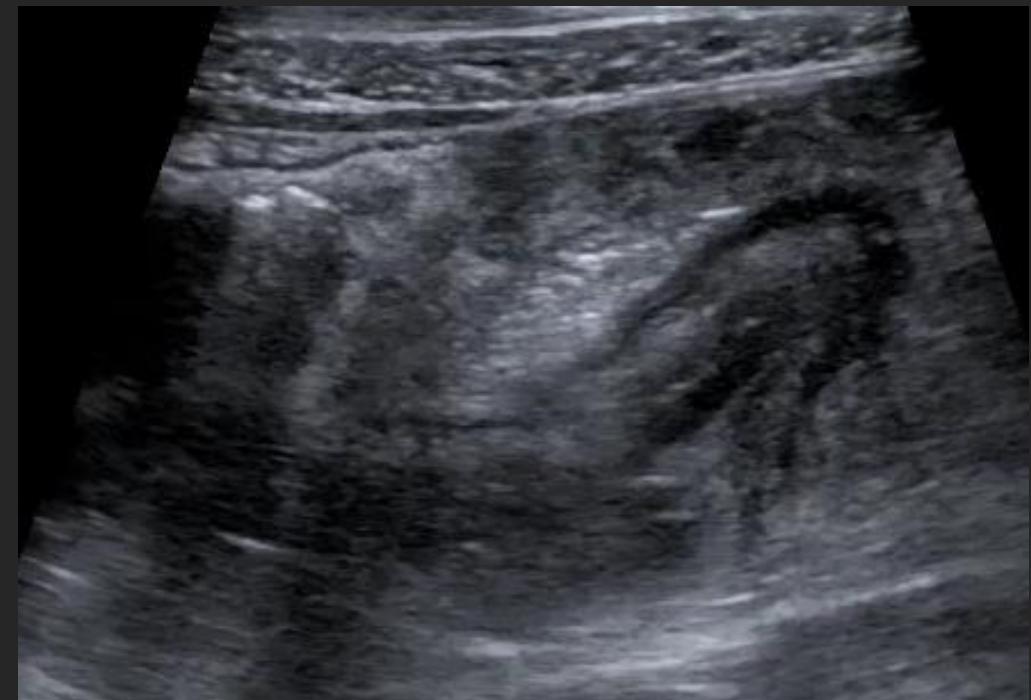
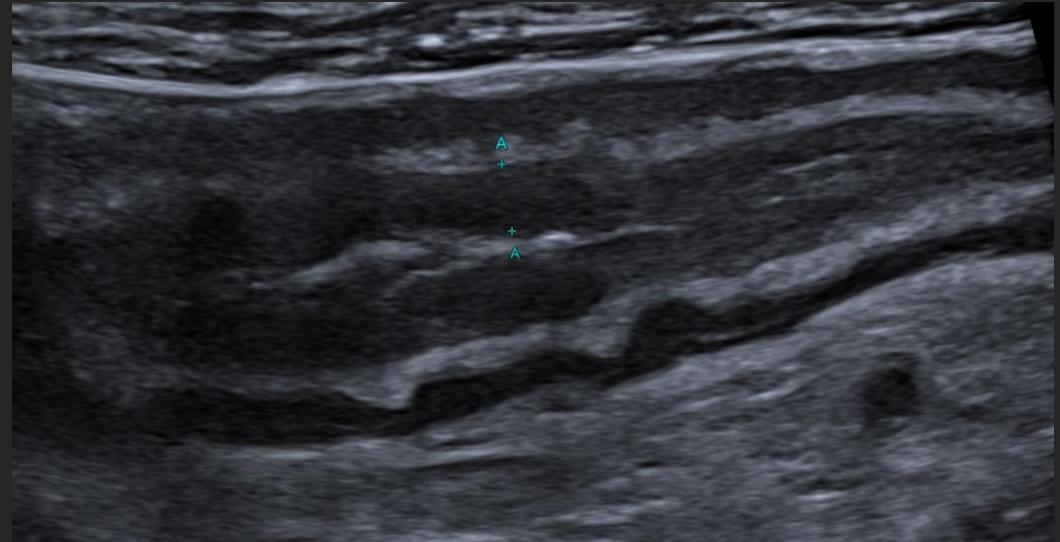
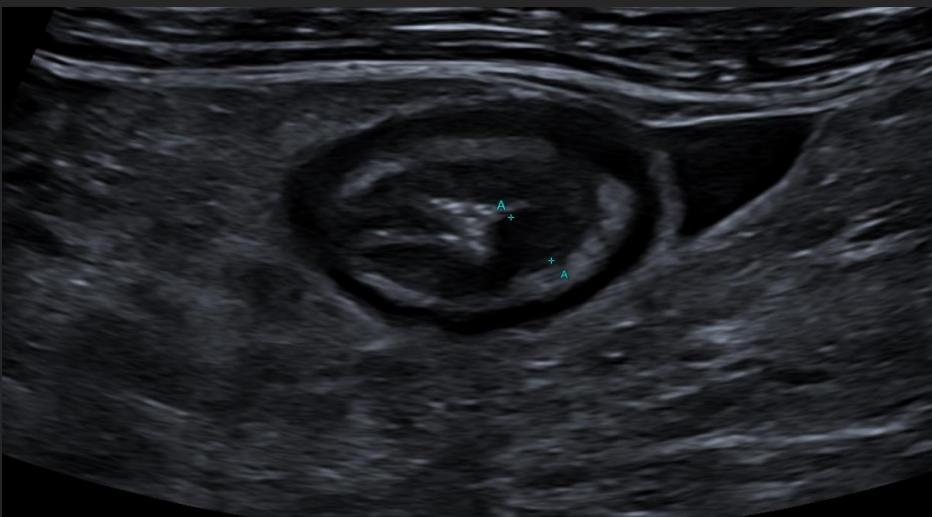
Infection

Oedema

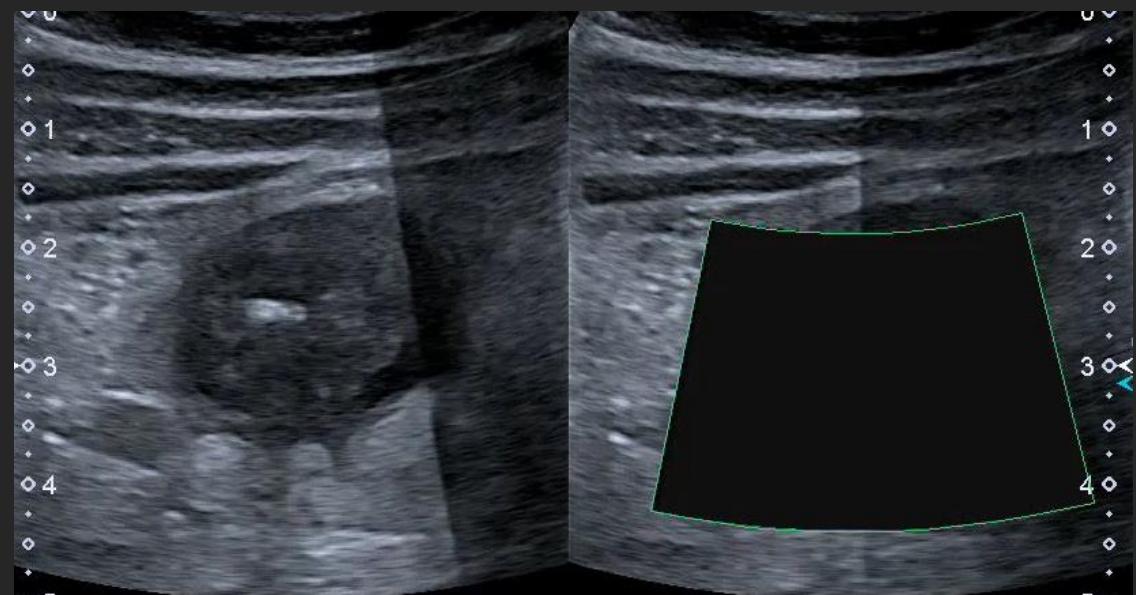
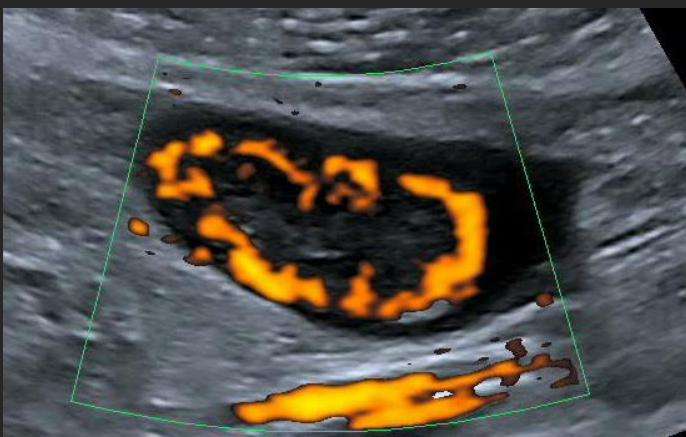
IBD

Crohns Disease

- Locations TI/SB/Colon
- Mucosa /submucosa +fat
- Ulcers / phlegmon / vascularity
fistulae / abscesses
- Skip lesions



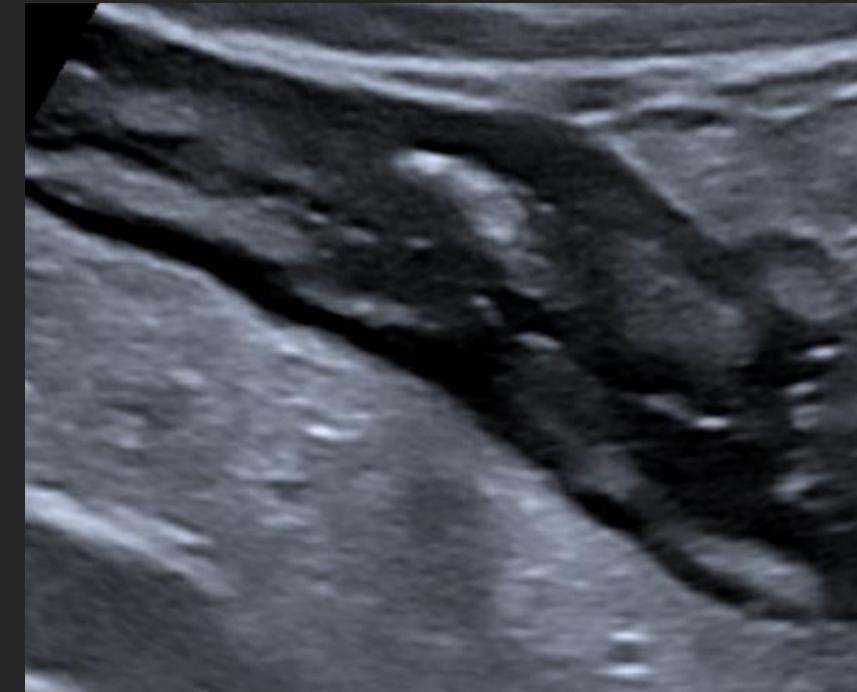
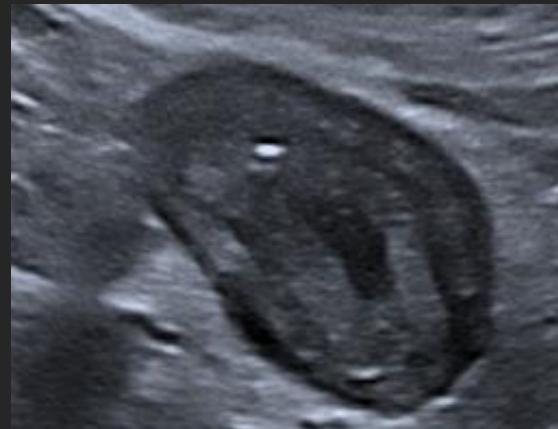
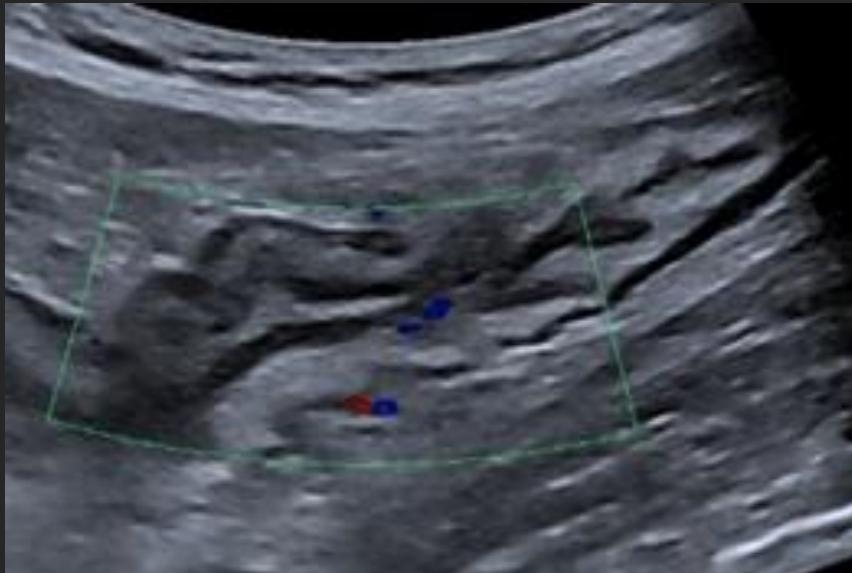
Other features



UC

COLON

CROHNS



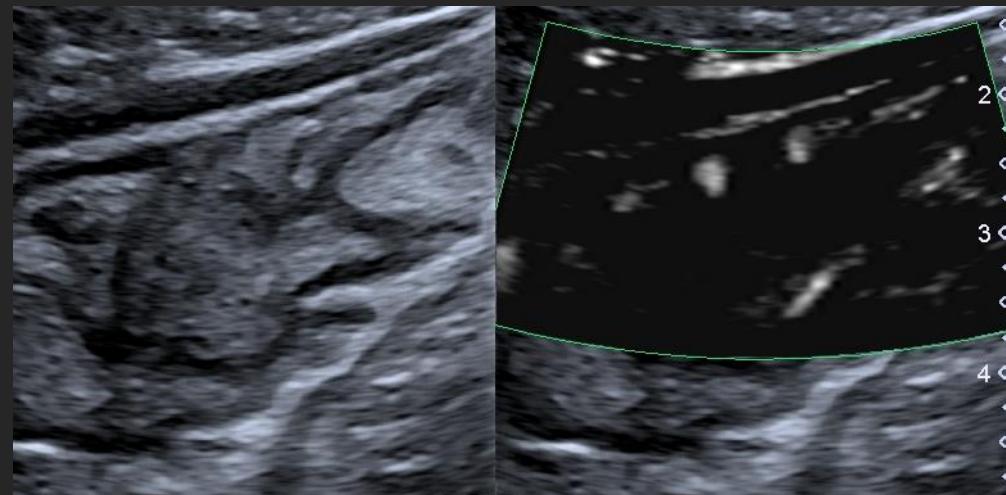
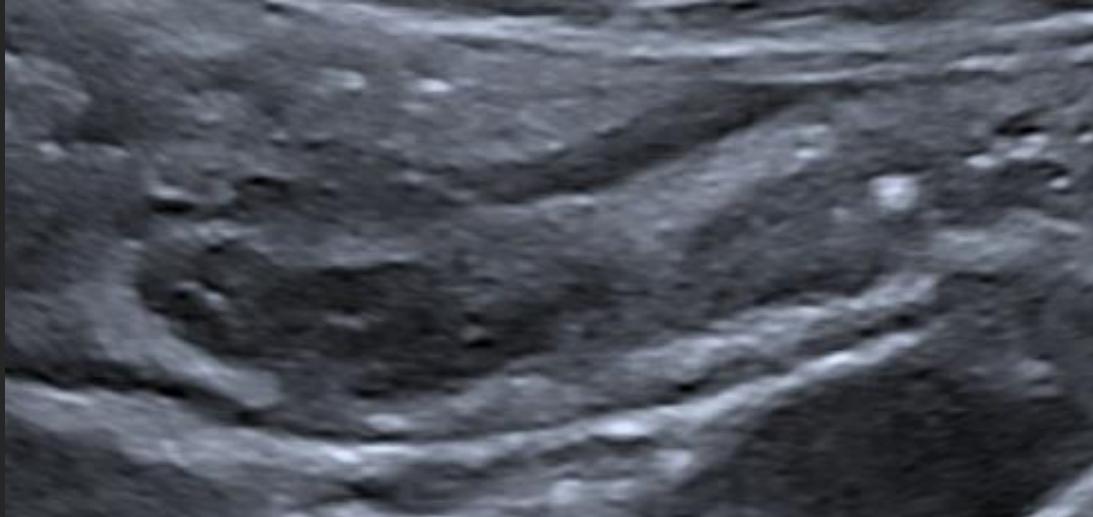
- Long segment – continuous
- Usually mucosa
- Ulcers shallow
- Vascularity variable

- Thicker mucosa / submucosa
- Discontinuous - skip
- Ulcers deeper
- Fat change
- Vascular

Infection

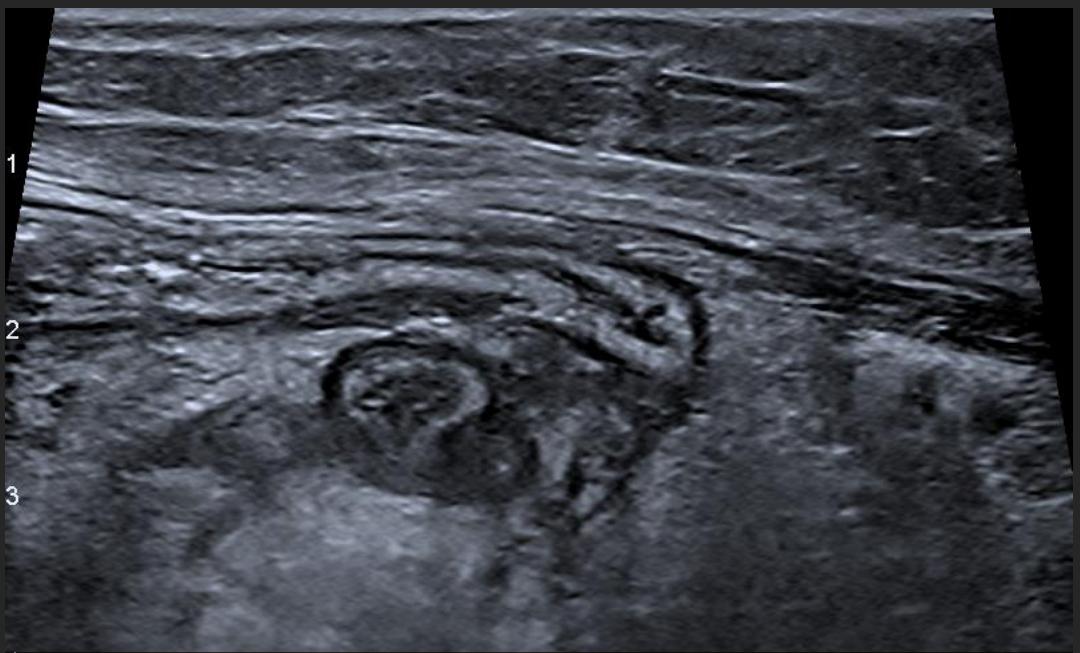
Ileocolitis

- Acute
- TI +/- RC
- Mucosa /submucosa – not fat
- Self limits

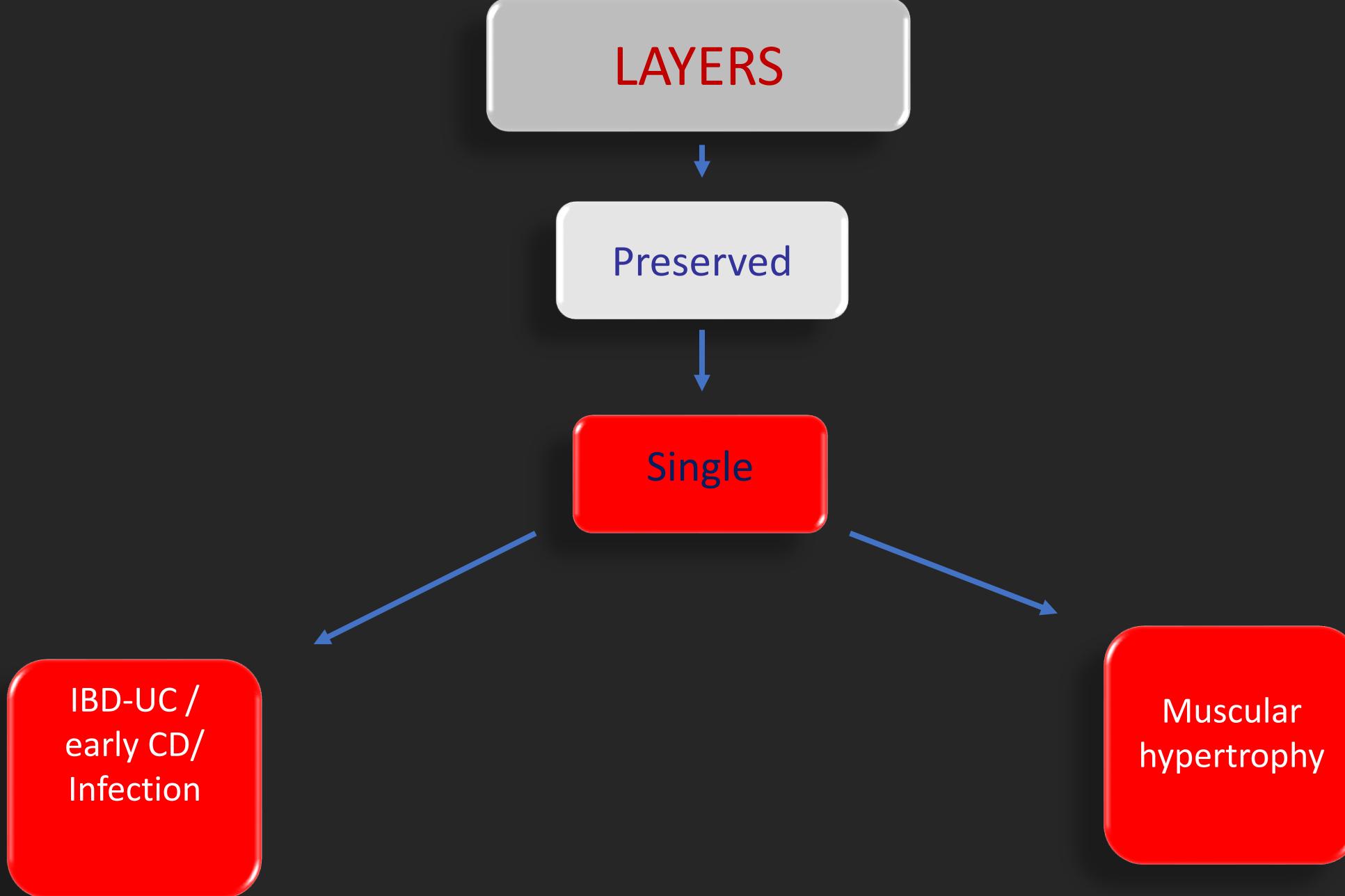


Oedema

- Proximal to obstruction
- Adjacent to inflammatory change
- Congestion – smv thrombosis
- Other



LAYERS

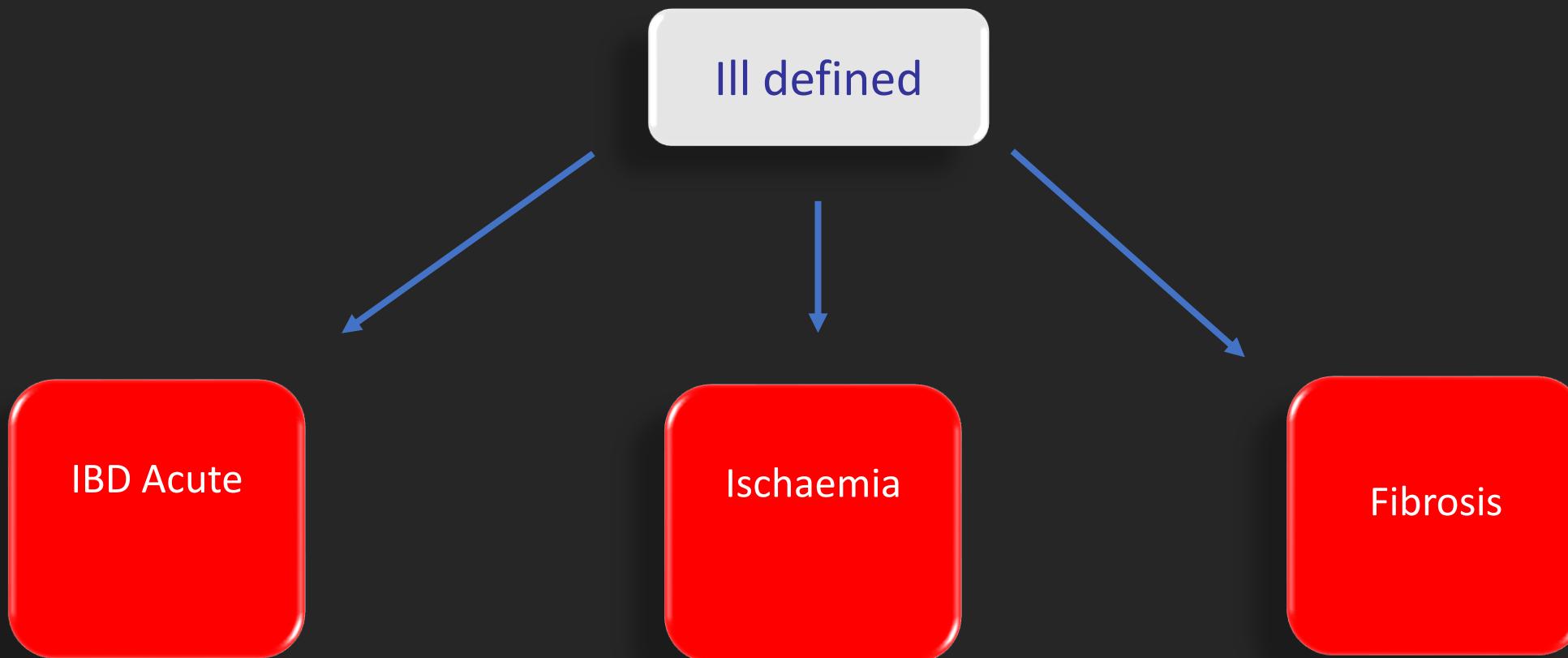


Single layer – muscular hypertrophy

- Commonest
- Outer muscularis hypertrophy – usually sigmoid associated diverticulosis

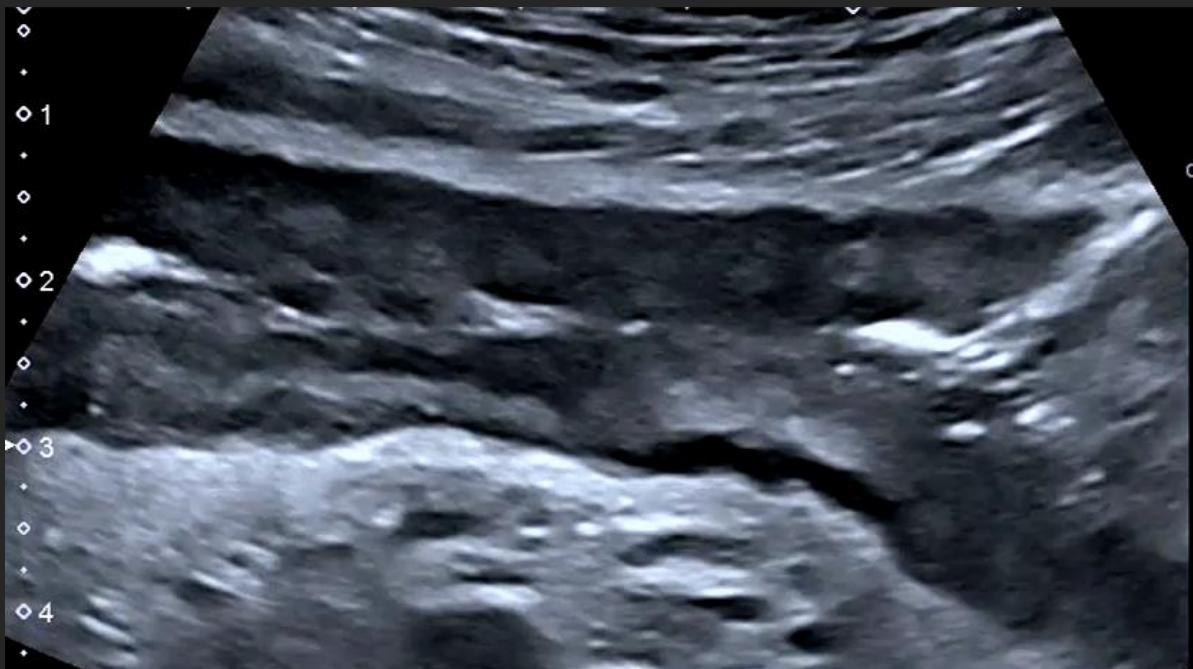


LAYERS

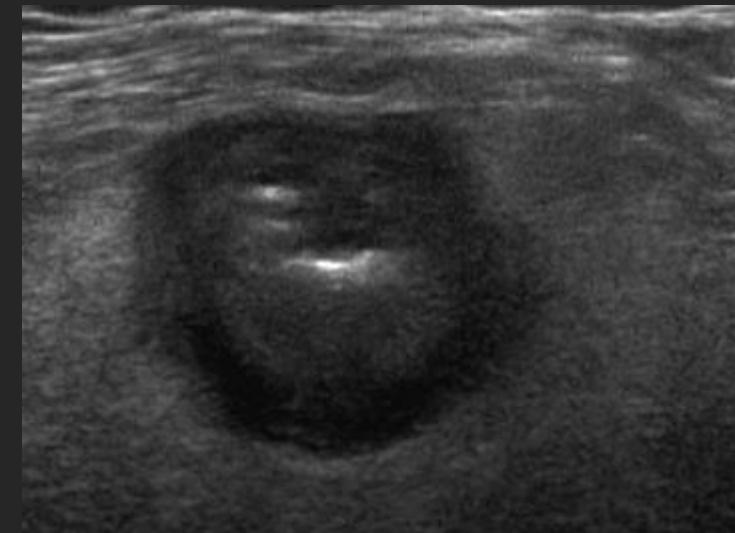


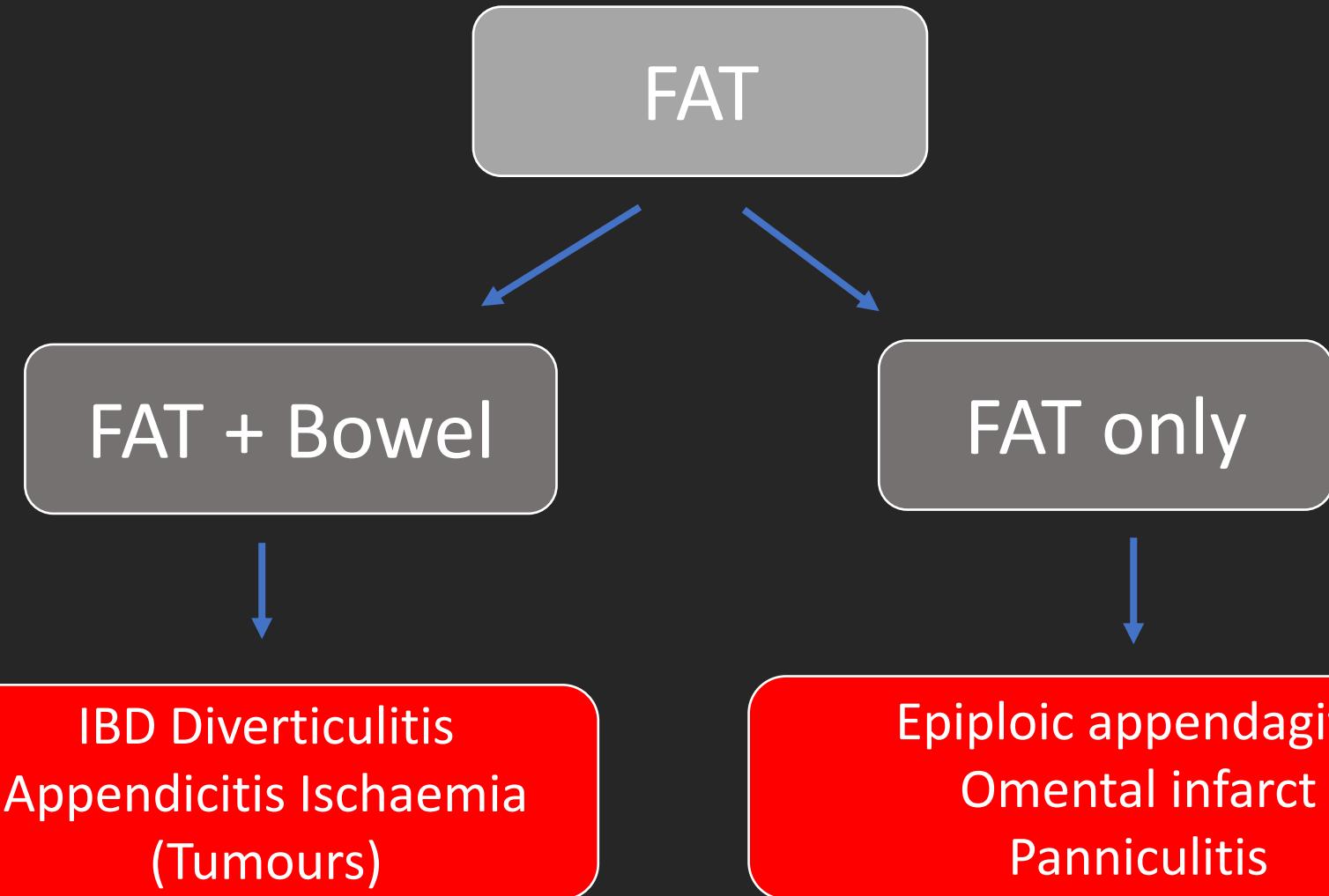
Layers ill defined

IBD



Ischaemia

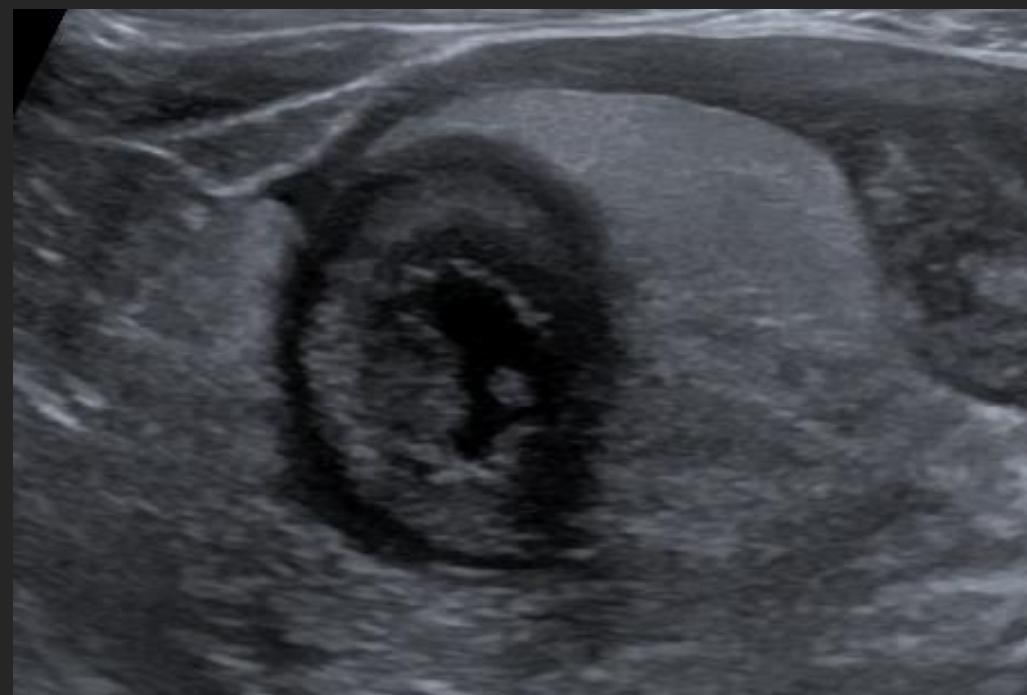
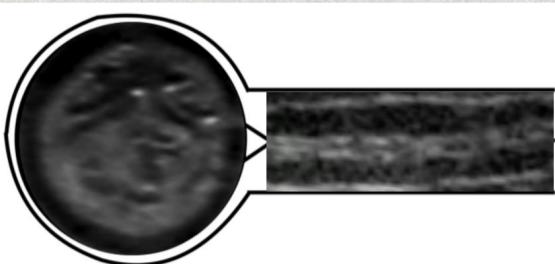
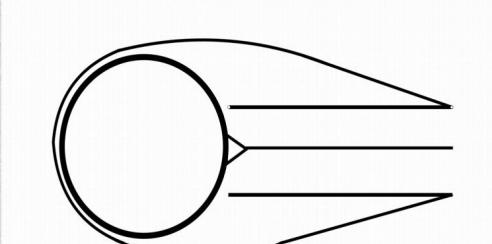
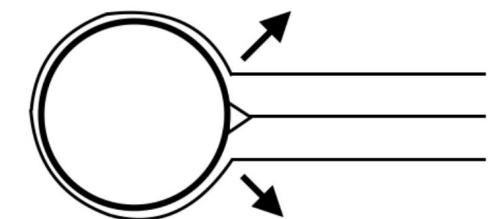




Fat and bowel

Crohns

- Fat creep
- Sign of activity



Fat and bowel

Appendicitis

- mesoappendix



Fat and bowel

Diverticulitis

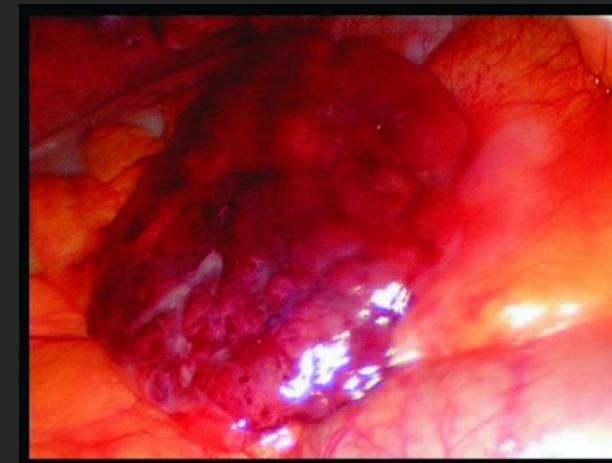
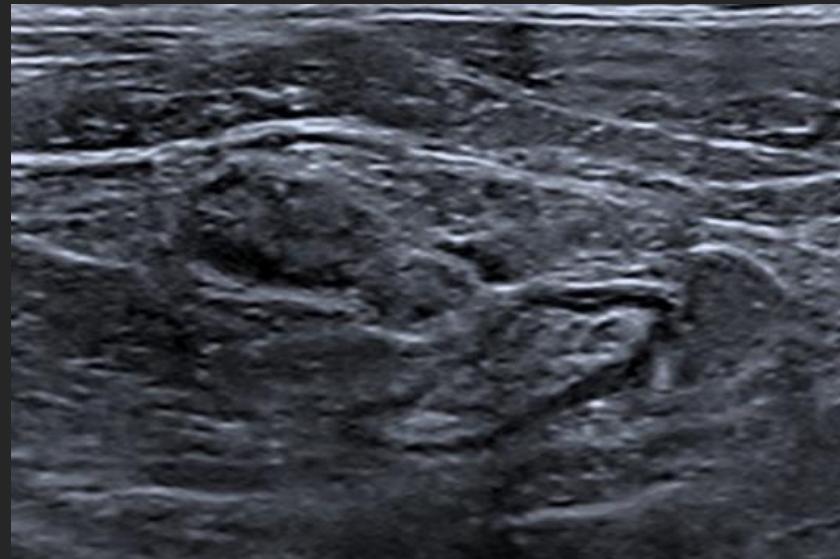
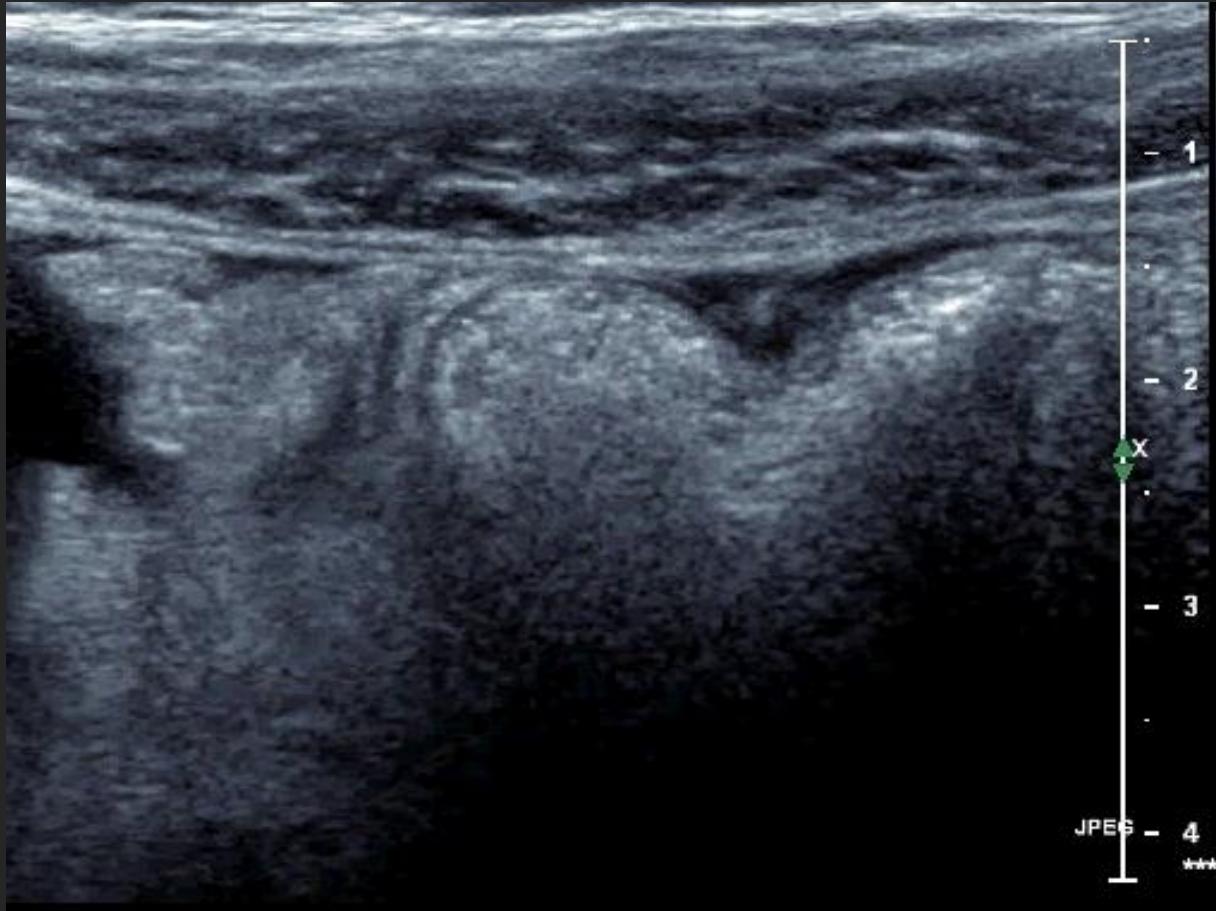
- Thickened diverticulum
- Sigmoid (Right Colon)
- Dome sign

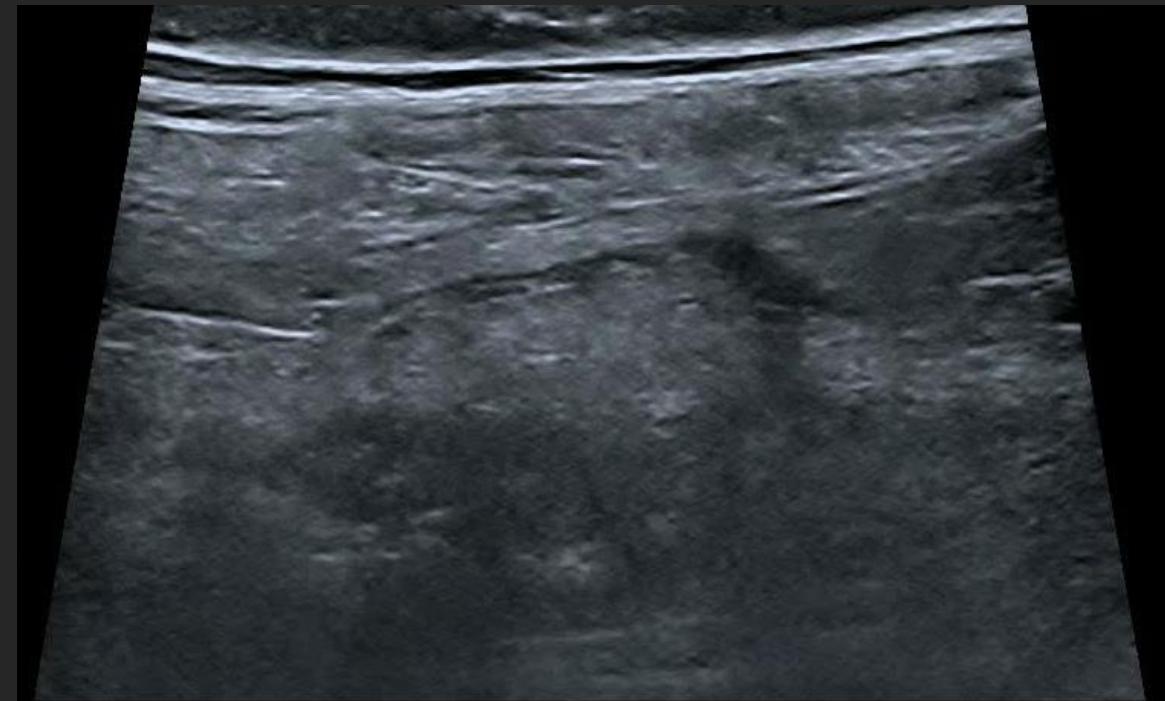


- Tumours



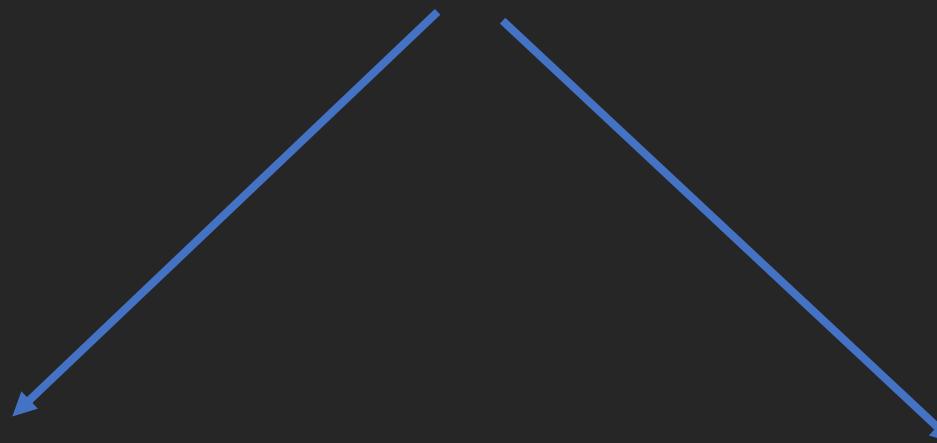
Fat only





LEFT COLON

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Increased
Obstruction/ileus
Enteritis
Malabsorption

Solid
Polyps
Intussusception

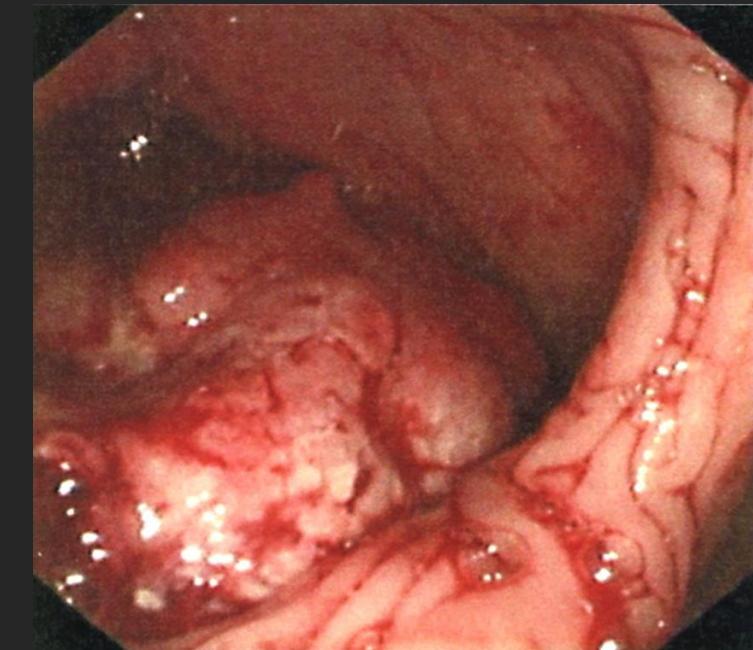
Lumen - Obstruction

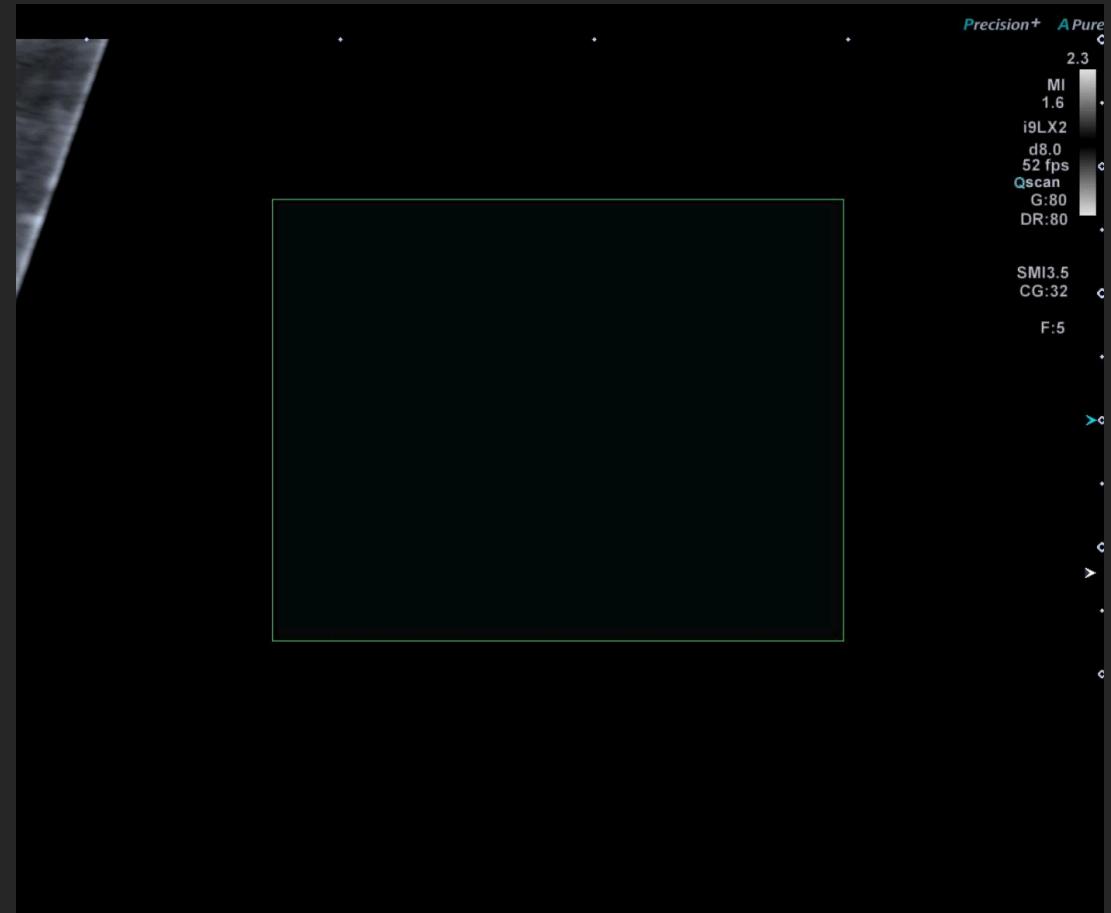
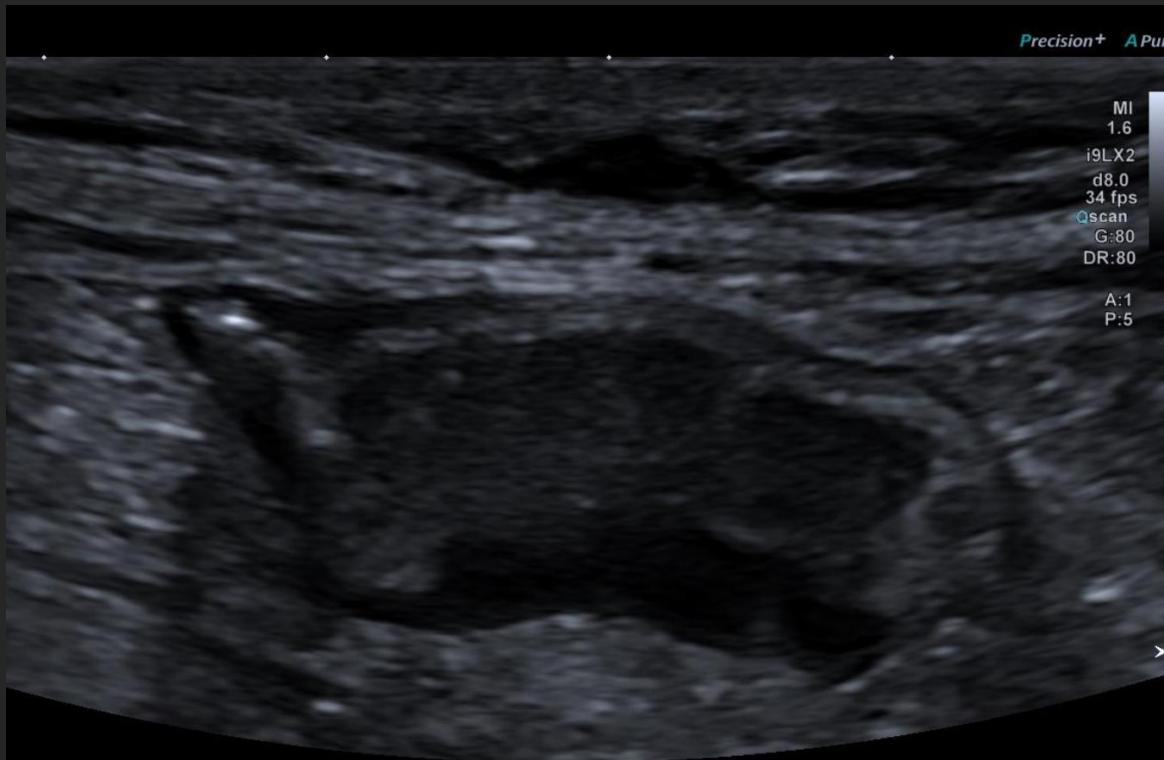


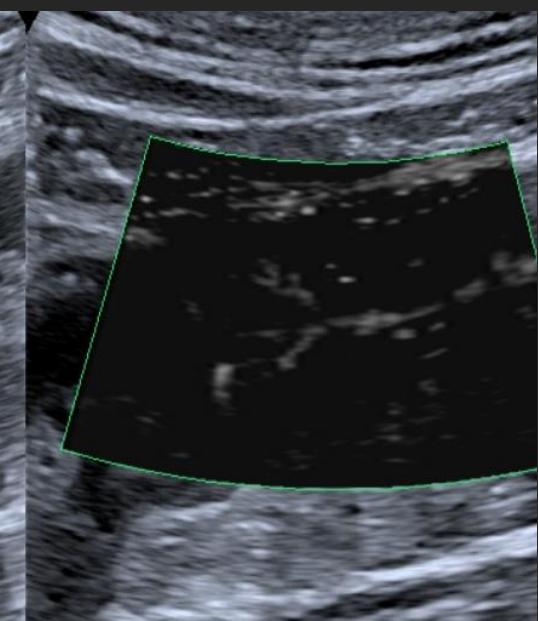
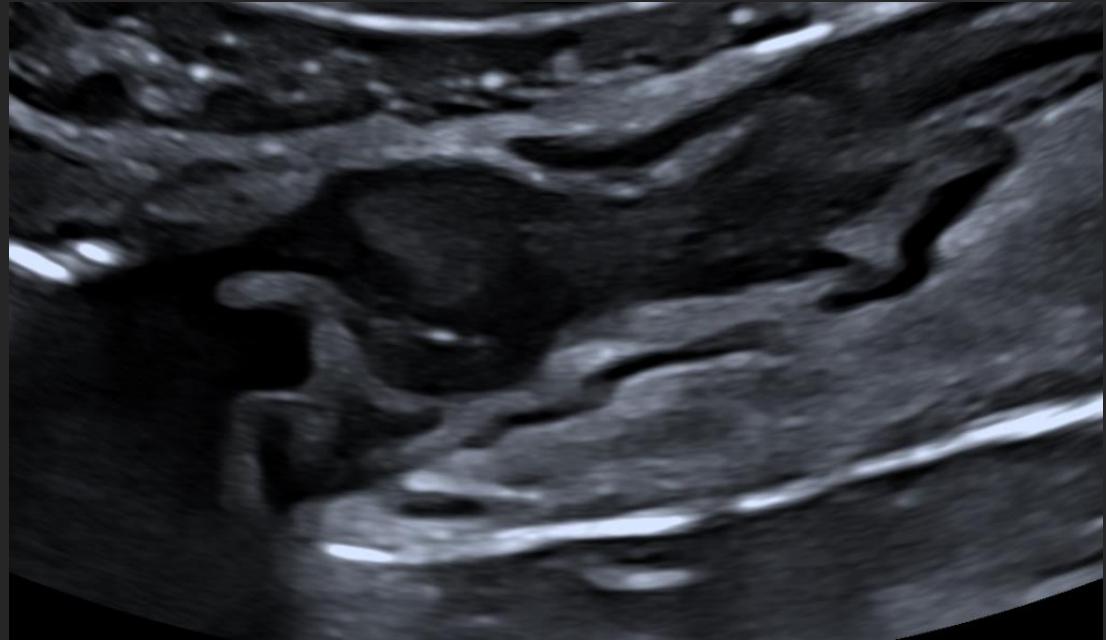
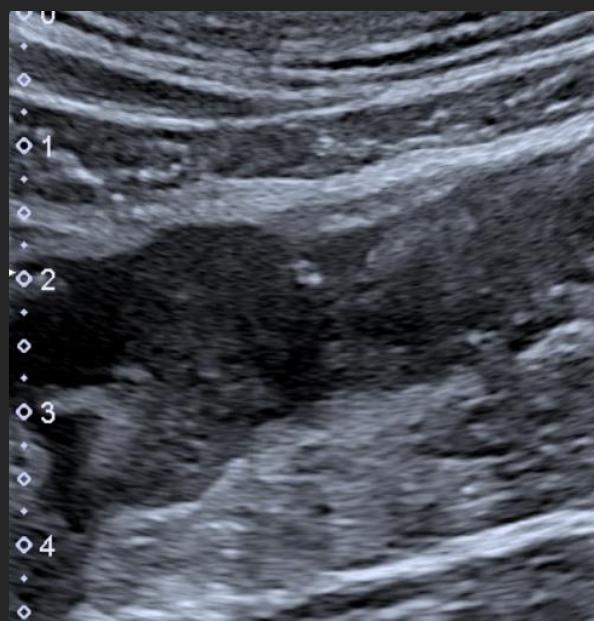
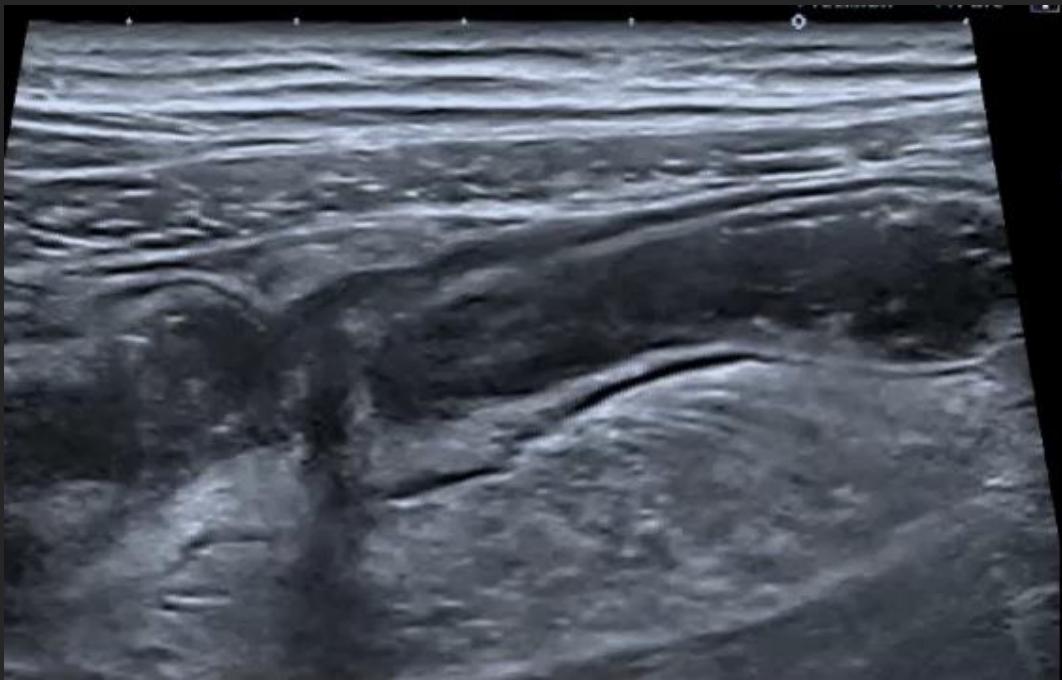
Lumen - Obstruction

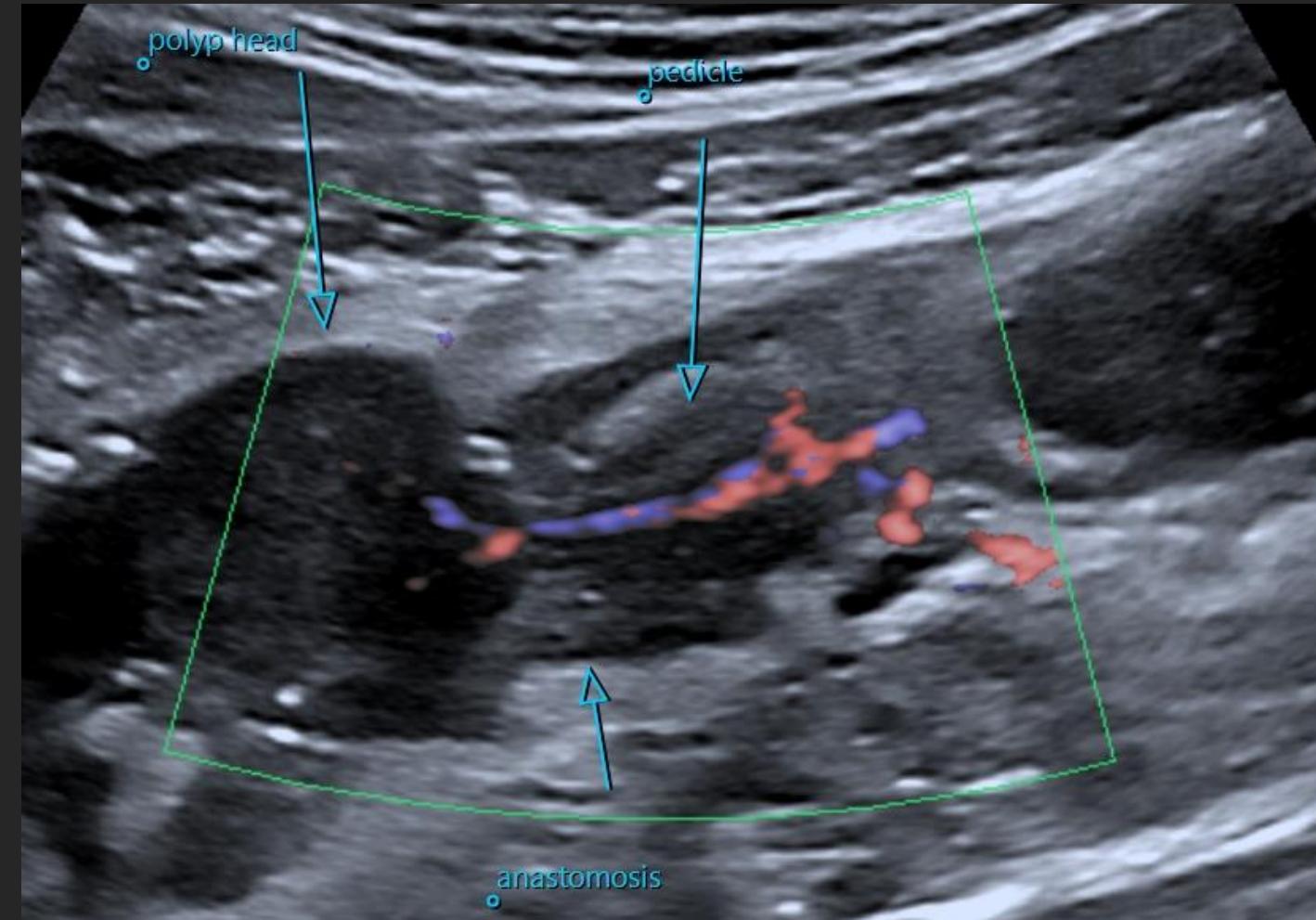


Intraluminal mass





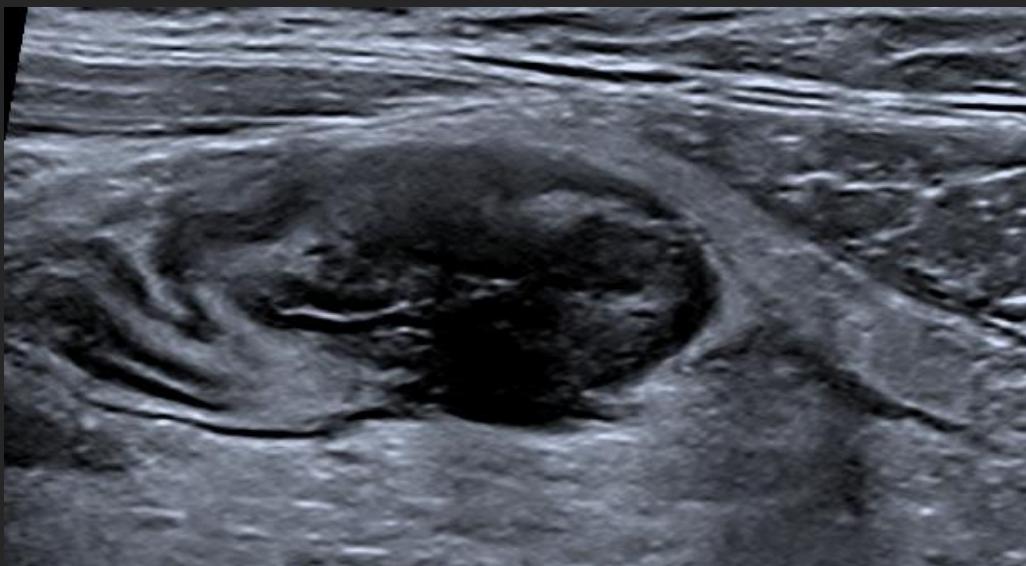




The putting it all together slide

1. Scan it
2. Identify it
3. Interpret it

- Layers -preserved / destroyed or fuzzy ?
- Which layer affected ?
- What's going on in the fat ?
- What's going on in the lumen?
- Any other features - vascularity ?
- Does it fit clinically ?



Thank you

