#### Case 1

#### **CLINICAL HISTORY**

Recent CT KUB showed stranding around the jejunal loops-? enteritis. Recommended to have a CT enterography. patient has ongoing abdominal discomfort.

Technique: CT volumetric enterography following intravenous contrast and Buscopan

# Findings:

Comparison made with the CT KUB dated 05/04/2022.

There is suboptimal small bowel distension and image quality is slightly degraded by motion artefact. Allowing for this the small bowel appears of normal morphology and configuration with no convincing mural thickening or inflammatory mesenteric stranding to suggest enteritis.

The colon is unremarkable other than some mild uncomplicated descending colonic diverticulosis. No radiological features of bowel obstruction or holdup.

Satisfactory post-contrast appearances of the liver, pancreas, and spleen. Both kidneys are unobstructed and the adrenal glands enhance normally. The remaining abdominal viscera are within normal limits.

Normal calibre abdominal aorta moderate mural aortoiliac atherosclerosis. Patent portal and mesenteric vasculature on this enteric phase study.

No enlarged abdominopelvic lymph nodes or free fluid.

Dependent atelectasis within the lung bases. No CT evident skeletal abnormality other than mild degeneration of the imaged spine.

## Opinion:

Suboptimal study, but within these limits there are no convincing features to suggest enteritis or other small bowel abnormality. I think that the apparent stranding evident on the previous CT-KUB is most likely artifactual, exacerbated by the low-dose nature of the study.

# Case 2

# **CLINICAL HISTORY**

Initially referred for 2WW LGI. Found to have signs of IBD on colonoscopy. Initially felt to be UC and treated as such. However, no response to Mesalazine and colonoscopy shows non-continuous lesions. ?Small bowel Crohn's. Thank you

No previous imaging available for comparison. Appearances are suggestive of mild inflammation (mild wall hyperenhancement and pericolonic increased vascularity and small volume likely reactive lymphadenopathy) involving the lower rectum, sigmoid colon and hepatic flexure. No other obvious large bowel abnormality. The terminal ileum over a length of 10 cm shows mild wall thickening, wall hyperenhancement with wall stratification, and mild increased perienteric vascularity in keeping with mild active inflammation. No evidence of any extraluminal complications or stricturing disease causing obstruction at this site. No demonstrable proximal small bowel abnormality. A focus of calcification is noted in the subdiaphragmatic region of the right lobe of the liver, no other focal liver abnormality. Gallbladder is thin-walled with no calcified stones. Normal appearances spleen, pancreas, adrenals, kidneys, aorta and urinary bladder. No intra-abdominal mass, free fluid or collection. Visualised lung bases are clear. No destructive focal bone abnormality.

Opinion: Patchy areas of inflammation in the large bowel and terminal ileal inflammation as described above. No demonstrable small bowel abnormality upstream of the terminal ileum.

#### Case 4

#### **CLINICAL HISTORY**

Crohns disease - upper GI involvement, and stricture last CT E 2018 30 -40cm distal and TI segment. worsening symptoms of diarrhoea and abdominal pain? if active inflammation. Currently on 5ASA monotherapy. Has a background of previous CVAs but no resideual neurology and cardiac pace maker insitu following

Comparison is made to previous imaging.

There is mild mucosal enhancement with mild irregular bowel wall thickening and skip lesions with mild pseudo sacculation for approximately 40 cm upstream from the ileocecal valve. The bowel wall thickening and enhancement is most marked in the distal 10 cm of the ileum. Remainder of the small bowel has unremarkable appearances.

Normal liver, spleen, kidneys, adrenals and pancreas. Thin-walled gallbladder with no bile duct dilatation.

Normal calibre aorta with no significant para-aortic lymphadenopathy.

Uncomplicated sigmoid diverticulosis. No free intraperitoneal fluid.

The lung bases are clear.

No suspicious bony lesions in the imaged bones.

Opinion: Distal small bowel Crohn's disease with evidence of chronic inflammatory change. Overall, the distribution is unchanged from the previous CT of 2018, however, I suspect there is a little more inflammation.

# Case 5

#### **CLINICAL HISTORY**

Crohns, prev ileocolic resection. Obstructive symptoms. Surgical planning

Comparison is made to external imaging.

lleocolonic dissection with anastomosis in the right upper quadrant.

There is bowel wall thickening of the distal 20 cm of the small bowel to the anastomosis in the right upper quadrant, this is most marked in the 4.5 cm the neo terminal ileum upstream of the anastomosis. There is mucosal hyperenhancement and the perienteric stranding. Fat hypertrophy and hyper vascularity in the mesentery. At the proximal aspect of this 4.5 cm segment there is deep ulceration with inflammatory change in the adjacent anterior abdominal wall muscles measuring 1.8 cm in diameter. No drainable collection here. This is unchanged from the previous MRI of March 2022. There are enhancing nodes in the draining mesentery measuring up to 13 mm in diameter. There is a small volume of free intraperitoneal fluid.

1 cm flash filling haemangioma in segment two of the liver. Thin-walled gallbladder with no bile duct dilatation. Normal spleen, kidneys, adrenals and pancreas.

No para-aortic lymphadenopathy.

The lung bases are clear. No suspicious bony lesions in the imaged bones. Degenerative change at the lumbosacral junction.

Opinion: Distal 20 cm of the small bowel demonstrates predominantly active inflammatory Crohn disease with early fistulation into the anterior abdominal wall. There is a little upstream dilatation of the small bowel suggesting element of holdup. overall, findings are not significantly changed since the MRI of March 2022.

#### Case 6

Comparison is made to previous imaging.

Small bowel preparation has reached to the colon at the time of scanning. There is adequate distension of the small bowel. There is a normal fold pattern in the jejunum and ileum. No MR evidence of small bowel Crohn disease.

Small hepatic cysts. There are bilateral simple renal cysts. Normal adrenals, spleen and pancreas. There is no para-aortic lymphadenopathy. The imaged bones return normal signal.

#### Opinion:

No evidence of small bowel Crohn disease.

#### Case 7

CLINICAL HISTORY FCP >2000 Colon normal ?SB Crohns

R1K0000700106601 23/09/2020 MRI Small bowel with contrast R1K0000700106602 23/09/2020 MRI Abdomen

No previous cross-sectional imaging for comparison.

Small bowel preparation has reached the colon at the time of scanning. There is adequate distension of the small bowel.

There is a 5cm segment of distal ileum just upstream of the ileocecal valve but does not open on any of the sequences. However, there is no significant bowel wall thickening, fat hypertrophy, mesenteric hyper vascularity. There are small enhancing nodes in the draining mesentery. The remainder of the small bowel has normal appearances with a normal fold pattern.

Normal imaged liver, spleen, kidneys, adrenals and pancreas. No gallstones. No bile duct dilatation.

The imaged bones return normal signal.

Opinion: No definite features of small bowel Crohn disease. However the terminal ileum does not fully open as described. Given that the patient's FCP is raised a targeted ultrasound is suggested.

# Case 8

**CLINICAL HISTORY** 

Abdo pain, assoc with looser stool, mildly elevated FCP, low back pain ?IBD Would appreciate a slot in the middle of the day

No previous imaging available for comparison.

Small bowel preparation has reached the colon at the time of scanning.

There is hyperenhancement of the terminal ileum for approximately 12 cm upstream of the ileocecal valve. There is no gross bowel wall thickening there is a little hyper vascularity in the draining mesentery but no enhancing nodes. The remainder of the small bowel has normal appearances a normal fold pattern in the jejunum and ileum.

Normal imaged liver, spleen, kidneys, adrenals and pancreas. There is no para-aortic lymphadenopathy.

The imaged bones return normal signal.

Opinion: Hyperenhancement of the distal 12 cm of ileum suggestive of mild ileitis. Changes are nonspecific.

# Case 10

#### **CLINICAL HISTORY**

New diagnosis of TI Crohn's disease. To assess the rest of the small bowel.

Sequences: Standard Enterography Protocol.

#### Findings

No relevant historic imaging available for comparison.

There is continuous mural thickening and hyperenhancement affecting the terminal and distal ileum for approx. 90-100 cm from IC valve. No evidence of fistulas or extraluminal disease. Multiple enlarged mesenteric lymph nodes are seen. Small volume pelvic free fluid.

No gallstones seen within a thin-walled gallbladder. Review of the remaining imaged upper abdominal viscera is unremarkable.

No evidence of sacroiliits. No suspicious bone lesions demonstrated.

## **Impression**

There is evidence of active Crohn's affecting 90-100 cm of terminal/distal ileum.

# Case 11

CLINICAL HISTORY Crohns disease ?small bowel diagnosed in Jordan 1 year ago CT abdo 2017 shows jejunal thickening. FCP 1440 I+D for perineal abscess 2019 For mapping

Comparison is made to the CT of December 2016.

There is adequate distension of the small bowel.

There is extensive discontinuous small bowel disease with bowel wall thickening over at least 1.5 m involving mid jejunum to mid ileum, with skip lesions and long segments of bowel wall thickening. There is enhancement and hyper vascularity in the mesentery in keeping with active disease. Mild dilatation of the skip lesion is noted, but no evidence of overt obstruction. No fistulation is identified. There are enlarged nodes in the small bowel mesentery. The terminal ileum has normal appearances.

Normal imaged liver, spleen, kidneys, adrenals and pancreas. No gallstones.

The imaged bones return normal signal.

# Opinion

Extensive discontinuous small bowel disease involving mid-jejunum to mid-ileum with no evidence of complicating fistulation or obstruction.