



IT'S AN
OMENTUM...

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CLINICAL HISTORY



A 26-year-old male, presented to surgical assessment unit with severe right iliac fossa pain. Acute onset, awoke from sleep with pain. Vomit x 2



Usually fit and well. No significant past medical or surgical history

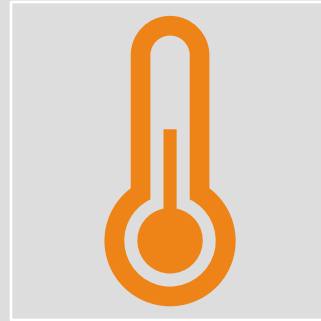


Visiting UK from South-East Asia

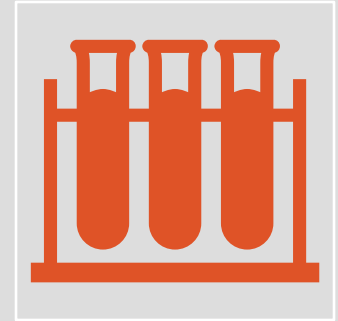
EXAMINATION AND LABORATORY FINDINGS



Abdomen soft, suprapubic
and RIF tenderness
Rovsing's +ve.
?Enlarged right groin node



Temp 38°C,
Obs otherwise normal



WCC 11.9, CRP 66

INVESTIGATIONS

- Surgical team suspected acute appendicitis and requested contrast-enhanced CT abdomen/pelvis to confirm



CT demonstrated
extensive peritoneal
nodularity in the pelvis

The nodularity extended into
a right-sided indirect, fat-
containing inguinal hernia

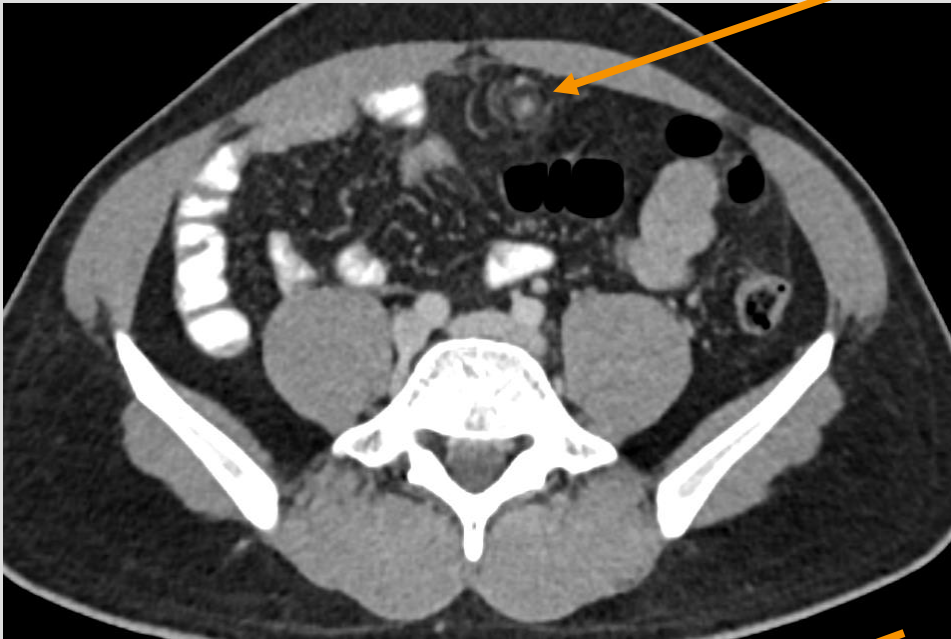


CT FINDINGS

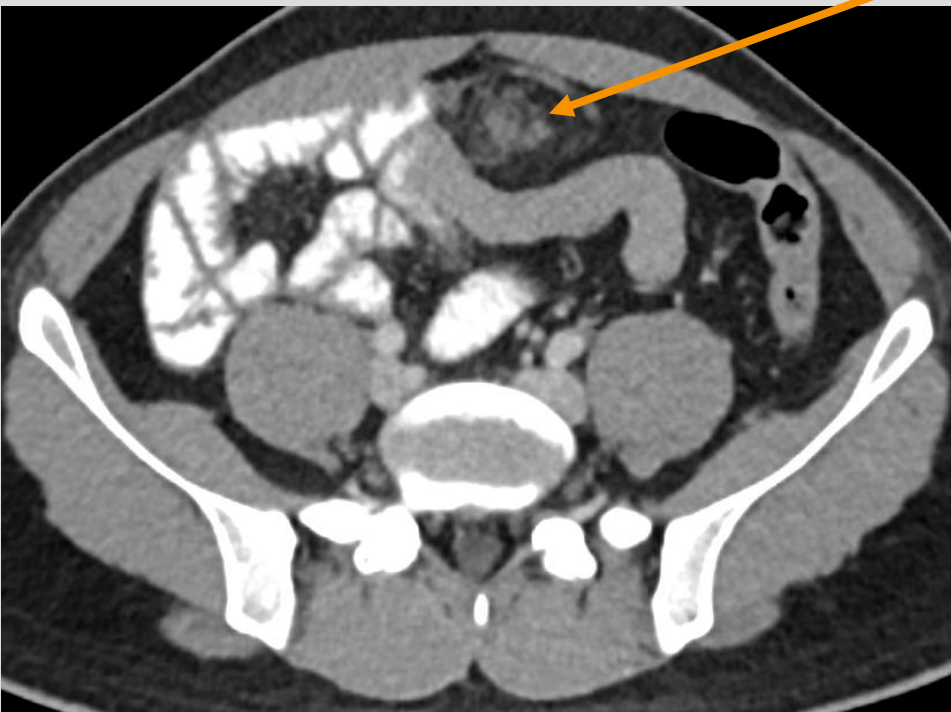
- The initial CT report raised the possibility of peritoneal tuberculosis, particularly given the patients origin from an endemic region
- Malignancy was considered within the differential, although less likely given the patients age

TB OR NOT TB....

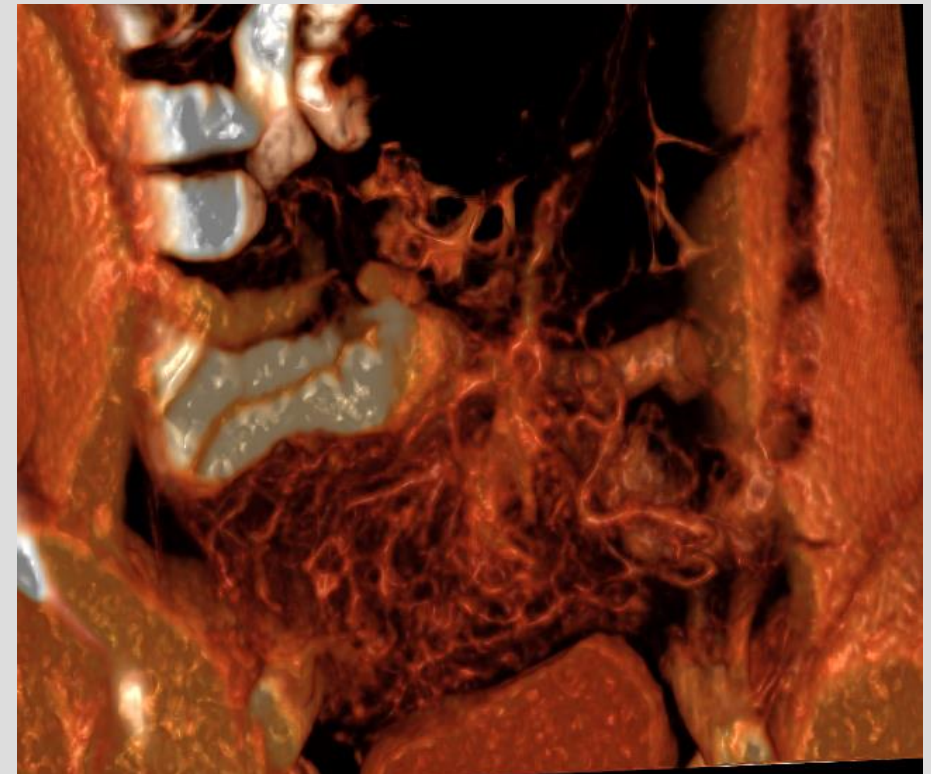
- Further review of imaging sought by the surgical team
- Patient had ongoing severe pain and it was felt that the acute onset and severity of symptoms could not be explained by tuberculosis



Sequential CT slices demonstrating swirling of the omental vessels

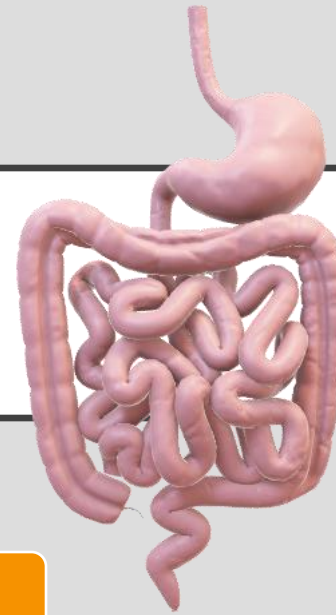


On review of CT the 'whirlpool sign' was identified in the omental vessels leading to a diagnosis of omental torsion.



3D reconstruction of torted omental vessels

OPERATIVE FINDINGS



Proceeded to laparoscopy which confirmed omental torsion with 360° rotation

Omentum appeared grossly ischaemic and dusky

Necrotic omentum was resected, and the right inguinal hernia was repaired

The patient had an uncomplicated recovery period and was discharged 3 days later

IT'S AN OMEN...TAL TORSION

- Omental torsion is a rare pathology and the clinical presentation commonly mimics appendicitis [1]
- Estimated incidence is 0.0016%. (Approx 4 cases for every 1000 cases of appendicitis)[2]
- Can be primary or secondary
- Secondary torsion is most commonly due to an inguinal hernia (other causes include surgical scars, tumours and cysts) [3]

IT'S AN OMEN...TAL TORSION

- Diagnosis is rarely made pre-operatively although is becoming more frequent with increasing use of imaging [4]
- As demonstrated in this case, radiologically the findings may mimic peritoneal pathologies including tuberculosis and peritoneal malignancy
- High index of suspicion is required where peritoneal nodularity is identified in patients with sudden onset severe pain
- Twirling of omental vessels or 'whirlpool sign' is key to making the diagnosis on CT

REFERENCES

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3. Siu, W.T., Law, B. K. B., Tang, C. N., Chau, C. H., & Li, M. K. W. (2003). Laparoscopic Management of Omental Torsion Secondary to an Occult Inguinal Hernia. In *Journal of Laparoendoscopic & Advanced Surgical Techniques* (Vol. 13, Issue 3, pp. 199–201). Mary Ann Liebert Inc. doi:10.1089/109264203766207744
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