Fishing through disseminated peritoneal leiomyomatosis

Dr Eleanor Phelps[1,2]; Dr John Hughes[1,3]; Dr Mark Woodward[1,3]

1 Great Western Hospital, Swindon

2 Radiology trainee

3 Consultant radiologist

Case Synopsis

- A 48-year-old female presented with a one-day history of severe epigastric pain, swelling and fever
- Previous surgical history of two **myomectomies** for uterine fibroids

Initial CT

Figure A and B: reformatted sagittal and axial CT slices:

→ Linear high attenuating structure within an inflamed thick-walled collection anterior to the gastric antrum and inferior to the left liver lobe

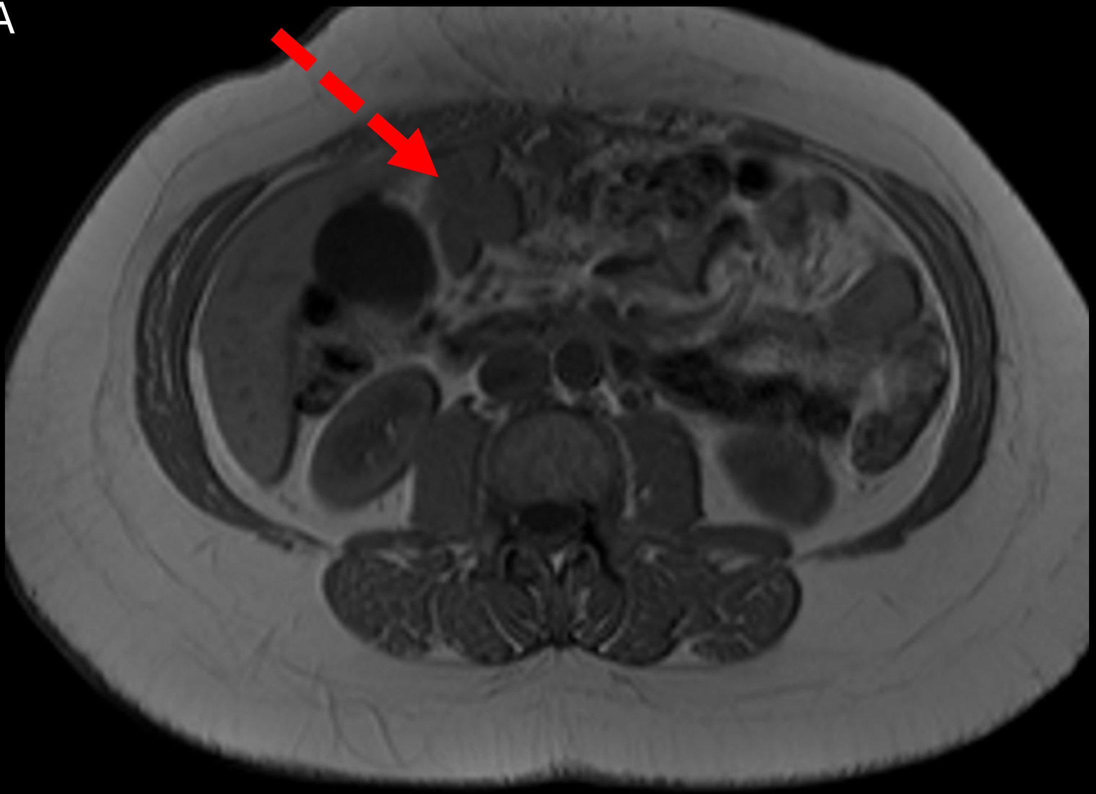
⇢ Homogenously attenuating peritoneal nodule

MRI

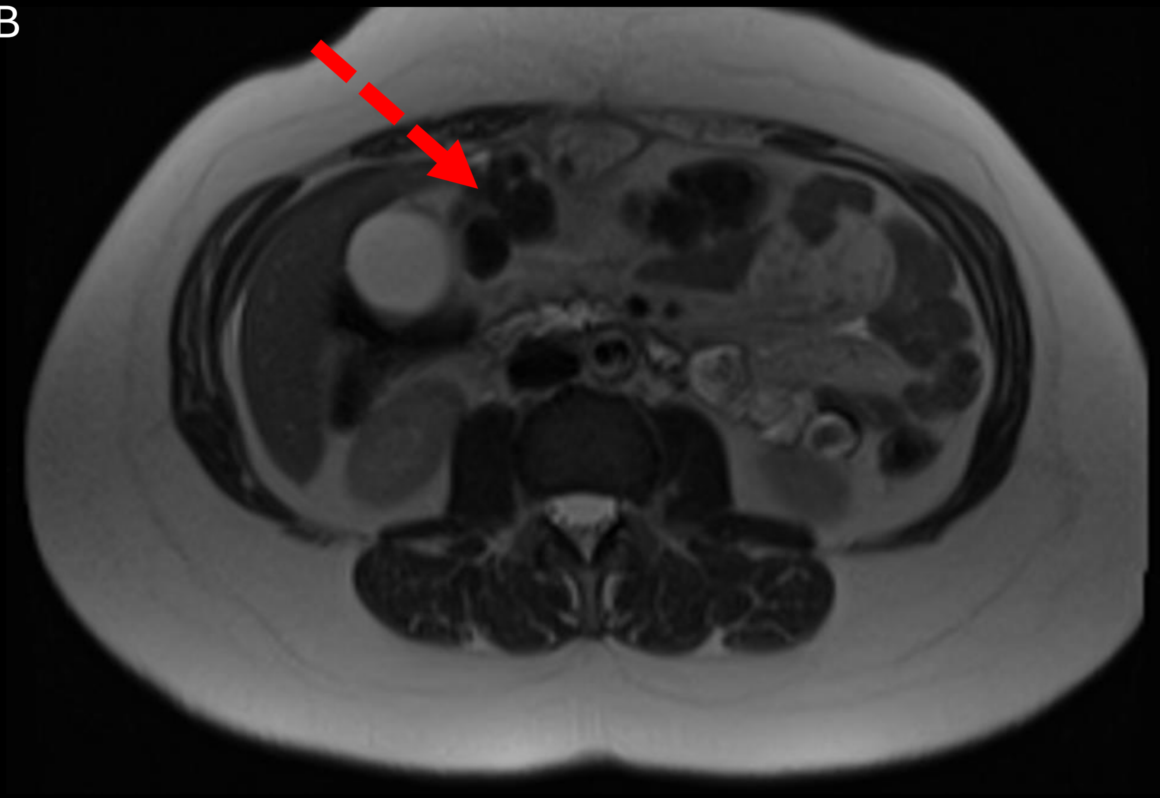
Figure A: MRI T1 axial sequence. Figure B: MRI T2 axial sequence.

Further peritoneal nodules demonstrate intermediate T1 signal and low T2 signal, isointense to skeletal muscle

A



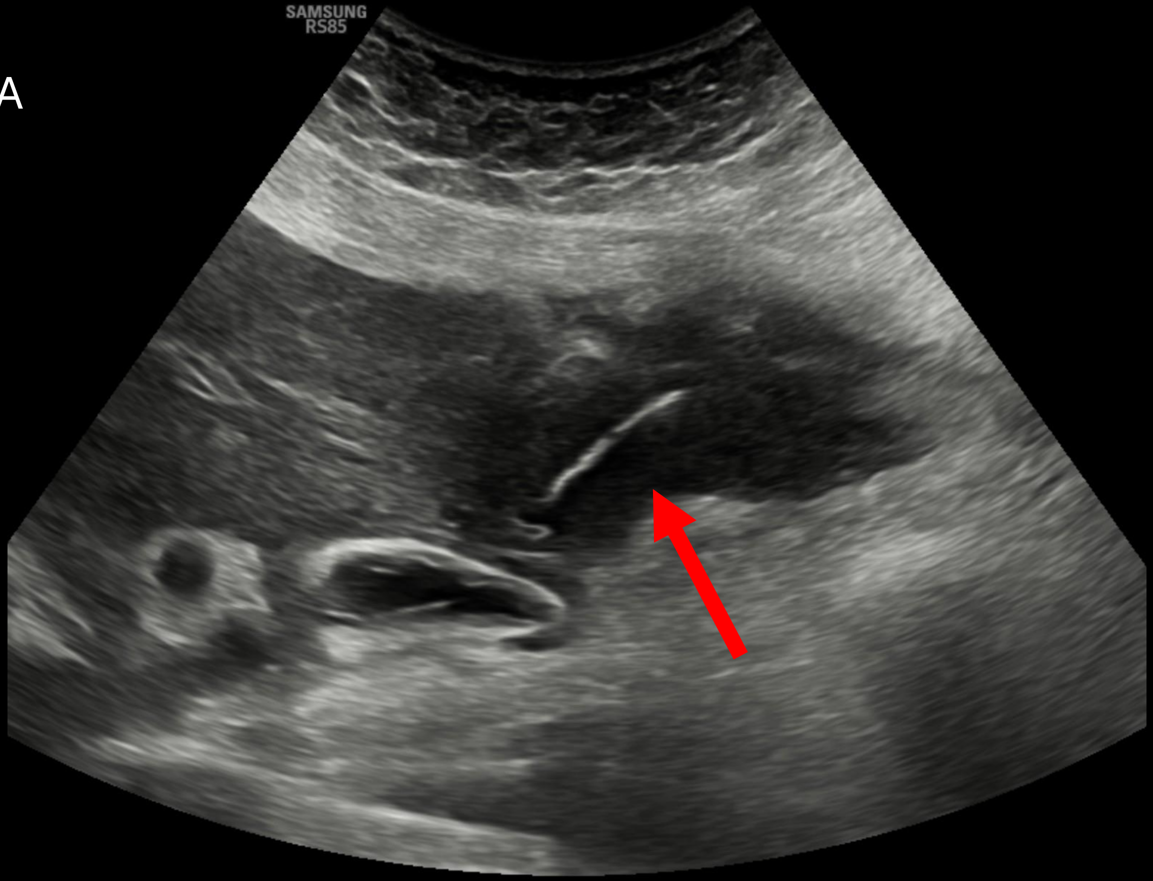
B



Ultrasound

Figure A: Transabdominal transverse ultrasound image of the midline upper abdomen:
Linear hyperechoic structure within an irregularly outlined hypoechoic collection

A



Imaging summary

- Single inflamed collection anterior to the gastric antrum with a central thin linear structure
- Multiple homogenous intraperitoneal nodules
- Fibroid uterus

Diagnosis

- A diagnostic laparoscopic was performed identifying an **abscess containing a fish bone** anterior to the antrum secondary to presumed gastric microperforation

- Surgical biopsy of an adjacent nodule showed a circumscribed neoplasm of benign spindled cells consistent with a **leiomyoma,** confirming the diagnosis of diffuse peritoneal leiomyomatosis

Learning point 1

Use the clinical history

The aetiology of diffuse peritoneal leiomyomatosis is usually iatrogenic: during myomectomy fibroids are cut into smaller pieces (morcellation) for removal through laparoscopic port sites which can result in dissemination of fibroid tissue

Learning point 2

Consider dual pathology

In this case the abscess containing the fish bone demonstrated different imaging features compared to the peritoneal leiomyomas

Learning point 3

Consider a foreign body

If a structure on imaging has odd/ unusual features or you are unsure what it is, consider a foreign body

Animal bones can perforate through the GI tract and act as a nidus for infection. Consider an animal bone foreign body if adjacent to or within the GI tract.