

## Introduction:

Foreign body ingestion is a common clinical scenario that can lead to serious complications, including abscess formation or hollow organ perforation. This case report describes a 24-year-old female patient who presented with abdominal pain and fever, ultimately diagnosed a fish bone foreign body with intra-abdominal abscess formation.

## Case Description:

A 24-year-old female presented to the emergency room with persistent abdominal pain for 2 days and fever for 1 day, maximum temperature of 38°C. She reported vomiting four times gastric contents, denied diarrhea or constipation. The patient had no past medical or surgical history. On physical examination, her abdomen was soft and flat, with tenderness in the left middle abdomen but no rebound tenderness. Bowel sounds were active. Point-of-care ultrasound (POCUS) revealed a 5x3 cm heterogeneous mass on the inferior wall of the stomach, containing a linear high echogenicity foreign body measuring approximately 2 cm, suggestive of foreign body ingestion with abscess formation.



Laboratory tests showed a white blood cell count of  $15.1 \times 10^9/L$  and a C-reactive protein level of 13.22 mg/dL. An abdominal pelvic CT scan was performed, which identified a 5x3.3 cm heterogeneous enhancing mass at the inferior gastric wall, with a linear high-density foreign body within the mass, consistent with abscess formation.

## Discussion:

POCUS is increasingly recognized as a valuable diagnostic tool in emergency and critical care settings, particularly for evaluating acute abdominal conditions. In this case, the patient present acute onset abdominal pain with fever and GI symptoms, POCUS played a crucial role in the timely identification of a foreign body within the gastric wall, leading to prompt intervention.

**Advantages of POCUS:** Rapid Assessment: POCUS allows for immediate evaluation of patients in the emergency department, providing real-time insights into abdominal pathology without the need for extensive imaging studies.

**Non-invasive and Safe:** Compared to CT scans, POCUS is non-invasive and involves no radiation exposure, making it particularly suitable for young patients and those requiring urgent evaluation.

## Conclusion:

The effective use of point-of-care ultrasound (POCUS) in the evaluation of a 24-year-old female patient presenting with persistent abdominal pain and fever due to a foreign body ingestion. POCUS provided immediate insights, allowing for early assessment and identification of a foreign body and associated abscess. This timely diagnostic approach directed the need for a CT scan, ultimately leading to an accurate diagnosis and prompt surgical intervention.

Reference:

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- 3.Hussein, A. (n.d.). Ultrasound and perforated viscus; dirty fluid, dirty shadows, and peritoneal enhancement