

Intramuscular abscess secondary to ileal perforation by a sharp-foreign body: role of contrast enhanced CT in emergency

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Background

Foreign bodies ingestion is a common reason for admittance to emergency department for pediatric patients and adults, as accidental events or intentional episodes. Majority of ingested foreign bodies pass spontaneously, but rarely serious complications (bowel perforation and obstruction) can occur (1). We present a case of small intestinal perforation caused by ingestion of a sharp foreign body mimicking acute appendicitis in the clinic presentation.

Case History

A 67-year-old woman presented to our department with pain in the right lower abdominal quadrant. There was no history of recent fever, changes in bowel habits, or urinary symptoms. Abdominal examination showed right lower abdominal pain, rebound tenderness, and muscle tension. Laboratory examinations revealed the following: white blood cells, 12.75×10^9 cells/L; neutrophil percentage, 82%. Abdominal enhanced computed tomography showed the presence of a linear lesion located between an the intestinal loop in right iliac fossa and the right rectus abdominis muscle, in which an abscess was revealed (Fig. 1). So, CT diagnosis was of intestinal loop perforation due to a sharp foreign body migrated into the right iliac fossa adjacent to the rectus abdominis muscle and consequent abscess formation. Surgical procedure was performed.



Figure 1. enhanced CT: linear lesion located between an the intestinal loop in right iliac fossa and the right rectus abdominis muscle, where an abscess was revealed.

Discussion

Perforation of the gastrointestinal tract due to foreign body's ingestion is rare; less than 1% of patients with foreign body ingestion develop perforation. Complications of sharp foreign body's perforation are intra-abdominal abscess formation, including hepatic and intraperitoneal abscesses, colorectal, colovesical, and enter vascular fistulas, inflammatory masses, and omental pseudotumors. Early diagnosis is mandatory for prompt management avoiding more severe and life-threatening complications. Computed tomography is considered the method of choice for diagnosing ingested foreign bodies and their complications due to its high-quality multiplanar capabilities and high resolution. Frequently, there is no extra luminal migration, and the foreign body could be removed endoscopic ally. When the foreign body has migrated out of the digestive tract, surgical extraction by a minimally invasive approach is safe and feasible, as in our case (2).

References

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2. Grassi R, Faggian A, Somma F, De Cecco CN, Laghi A, et al. (2015) Application of imaging guidelines in patients with foreign body ingestion or inhalation: literature review. *Semin Ultrasound CT MR* 36:48-56.