

# An Unusual Cause of Acute Pancreatitis

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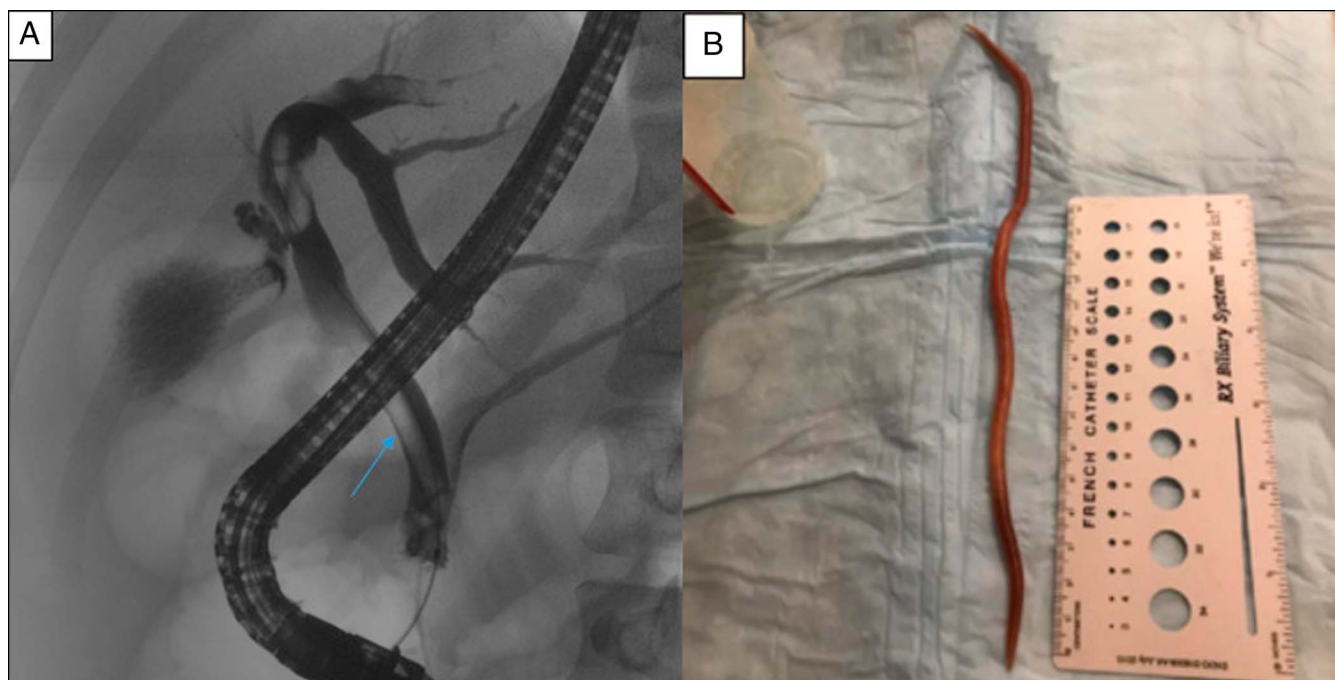
**Figure 1.** Magnetic resonance cholangiopancreatography result.

## CASE REPORT

Acute pancreatitis (AP) is one of the most common gastrointestinal disorders necessitating hospital admission.<sup>1</sup> Although gallstones and alcohol remain the leading causes, determining the underlying etiology of AP is a crucial step for guiding appropriate and timely therapeutic interventions, optimizing healthcare resource utilization and minimizing the risk of recurrence.<sup>2</sup>

A 21-year-old Hispanic man with no significant medical history presented with acute, new-onset, severe postprandial epigastric pain radiating to the back, associated with nausea and vomiting but no diarrhea, fever, chills, jaundice, melena, hematochezia, or hematemesis. He denied smoking, alcohol, illicit or prescribed drug use, or any over-the-counter medications or supplements. He was born in Mexico and moved to the United States 3 years ago. On presentation, his laboratory tests were pertinent for a white cell count of 14.5 K/mm<sup>3</sup>, lipase 3,040 U/L (>53 U/L), aspartate aminotransferase 39 U/L, alanine aminotransferase 26 IU/L, alkaline phosphatase 66 IU/L, total bilirubin 0.6 mg/dL, and serum triglyceride level 55 mg/dL.

Computed tomography showed AP and biliary dilation; magnetic resonance cholangiopancreatography noted a large, elongated filling defect within the common bile duct extending into the left main hepatic duct (Figure 1).<sup>3</sup> Given concern for biliary obstruction, an endoscopic retrograde cholangiopancreatography (ERCP) was performed.



**Figure 2.** Fluoroscopic image during endoscopic retrograde cholangiopancreatography (A) and retrieved *Ascaris* roundworm (B).

During ERCP, the ventral pancreatic duct was inadvertently cannulated and limited contrast injected to reduce the risk of post-ERCP pancreatitis. Limited pancreatogram was normal with the pancreatic duct measuring 3 mm in diameter. Due to challenging bile duct access, a pancreatic duct stent was placed for prophylaxis and to facilitate biliary cannulation. Upon successful bile duct cannulation and contrast injection, the maximum diameter of the bile duct was 8 mm and no strictures were seen. However, a long linear filling defect was noted in the main bile duct and left hepatic duct (Figure 2).

A biliary sphincterotomy was performed, and the biliary tree was swept with a 12 mm stone extraction balloon with removal of a 6 inch long *Ascaris* roundworm.<sup>4</sup> A Roth net retrieval device was used to remove the parasite from the duodenum (Video 1). A plastic stent was placed in the common bile duct to maintain patency.

The patient was given intraprocedural indomethacin, and he tolerated the ERCP with no complications. He was prescribed a one-time dose of albendazole for treatment of *Ascaris lumbricoides* and was discharged home 2 days after the ERCP.<sup>5</sup> The patient was lost to follow-up for 10 months, but repeat ERCP was eventually performed with removal of biliary duct stents.

## DISCLOSURES

**Author contributions:** A. Hajj Ali collected the clinical data, interpreted the data and contributed to drafting the manuscript; N. Saleem: interpreted the data and critically revised the manuscript and is the article guarantor; N. Bailey, H. Fatima and J. Watkins: interpreted the data and critically revised the manuscript.

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Informed consent was obtained for this case report.

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## REFERENCES

1. Peery AF, Crockett SD, Murphy CC, et al. Burden and cost of gastrointestinal, liver, and pancreatic diseases in the United States: Update 2018. *Gastroenterology*. 2019;156(1):254–72.e11.
2. Banks PA, Bollen TL, Dervenis C, et al. Classification of acute pancreatitis: 2012: Revision of the Atlanta classification and definitions by international consensus. *Gut*. 2013;62(1):102–11.
3. Chung CY, Huynh KN, Khoshpour P, Muñoz Durán JA. Hepatobiliary and pancreatic ascariasis. *Radiographics*. 2023;43(8):e230049.
4. Kenamond CA, Warshauer DM, Grimm IS. Best cases from the AFIP: *Ascaris* pancreatitis. *Radiographics*. 2006;26(5):1567–70.
5. Holland C, Sepidarkish M, Deslyper G, et al. Global prevalence of *Ascaris* infection in humans (2010–2021): A systematic review and meta-analysis. *Infect Dis Poverty*. 2022;11(1):113.

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