

Jejunal Intussusception Caused by a Nasointestinal Ileus Tube

Junpei Komagamine, Daichi Noritomi

Department of Internal Medicine, National Hospital Organization Tochigi Medical Center, Nakatomatsuri, Utsunomiya, Tochigi, Japan

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ABSTRACT

A 79-year-old man was admitted to our hospital due to pleural empyema. After 4 weeks of antimicrobial therapy and pleural drainage, he recovered but complained of new-onset abdominal pain. Abdominal computed tomography revealed adhesive small bowel obstruction and a nasointestinal ileus tube with intermittent suction was inserted. This procedure initially decreased his abdominal pain, but severe abdominal pain and vomiting developed 3 days later. Repeat abdominal computed tomography revealed jejuno-jejunal intussusception due to the nasointestinal ileus tube. Our patient was initially treated conservatively. However, he underwent surgical reduction due to clinical deterioration 1 day after diagnosis and died from a surgical complication 19 days later. Intussusception is a rare but fatal complication caused by placement of a nasointestinal ileus tube in the small intestine. Because urgent operative reduction is needed to avoid intestinal resection in most cases, early diagnosis and surgical reduction of intussusception are critical.

KEYWORDS

Intussusception, nasointestinal ileus tube

LEARNING POINTS

- Intussusception is a rare but fatal complication caused by placement of a nasointestinal ileus tube.
- Intussusception should be suspected if abdominal pain and distention worsen after placement of a nasointestinal ileus tube.
- Urgent operative reduction is needed for intussusception due to a nasointestinal ileus tube.

CASE DESCRIPTION

A 79-year-old man with schizophrenia and a history of appendectomy was admitted to our hospital due to pleural empyema. After 4 weeks of antimicrobial therapy and pleural drainage, he recovered but complained of new-onset abdominal pain. Abdominal computed tomography revealed adhesive small bowel obstruction. A nasointestinal ileus tube with intermittent suction was inserted, and intravenous hydration was started. These procedures initially decreased his abdominal pain, but severe abdominal pain and vomiting developed 3 days later. He was alert and oriented. His temperature was 36.2°C, blood pressure 117/91 mmHg, pulse 95 beats per minute, respiratory rate 26 per minute, and oxygen saturation 96%. On examination, an abdominal mass was palpated in the left upper quadrant, but no tenderness or signs of peritonitis were found.

Laboratory tests revealed an elevated lactate level of 2.3 mmol/l and an elevated C-reactive protein level of 5.2 mg/dl. Repeat abdominal computed tomography revealed a typical target sign around the nasointestinal ileus tube (Fig. 1). Jejuno-jejunal intussusception due to a nasointestinal ileus tube was diagnosed. Our patient was initially treated conservatively. However, he underwent surgical reduction due to clinical deterioration 1 day after diagnosis, and the involved necrotic jejunal segment was resected (Fig. 2). Nonetheless, he died from a surgical complication 19 days later.



Figure~1.~Abdominal~contrast-enhanced~computed~tomography~showed~a~typical~target~sign~around~the~naso intestinal~ileus~tube



 $\label{thm:constraint} \textit{Figure 2. Antegrade jejunal intussusception with is chaemic change}$



DISCUSSION

Intussusception is a rare but fatal complication caused by placement of a nasointestinal ileus tube in the small intestine^[1]. Most intussusceptions associated with a nasointestinal ileus tube are antegrade^[1]. As in our case, this complication often occurs a few days after placement, and an abdominal mass can be palpated at the site of obstruction on physical examination^[2]. Because urgent operative reduction is needed to avoid intestinal resection in most cases, early diagnosis and surgical reduction of intussusception are critical^[3]. However, the diagnosis of intussusception associated with a nasointestinal ileus tube is often delayed because many physicians are unaware of this complication due to its rarity. Therefore, a diagnosis of intussusception should be suspected if abdominal pain and distention worsen after placement of a nasointestinal ileus tube^[1].

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