

A Case of Ascariasis Mimicking Jejunal Intussusception

Jejunal İnvajinasyonu Taklit eden Askariazis

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ABSTRACT

Intussusception is the common abdominal emergency in early childhood. The clinical presentation is characterized by the triad of abdominal colics, red jelly stools (positive in 66%) and a palpable mass (70%). Ascariasis is a common infestation in tropical countries because of poor hygiene and low socioeconomic conditions. Ascariasis can cause serious intra-abdominal complications such as intestinal obstruction. We have reported a case of abdominal pain and intestinal obstruction, which was finally diagnosed as ascariasis.

The results of CT scanning in such patients, may be different from clinical finding in sometimes. In the differential diagnosis of recurrent abdominal pain, ascaris should be kept in mind by physicians in endemic areas.

Key words: Abdominal colic pain, Ascariasis, Childhood, Intussusception

ÖZET

İnvajinasyon erken çocukluk döneminde sık görülen abdominal acildir. Klinik olarak kırmızı jöle dışkı (% 66 pozitif), karın kolikleri ve ele gelen kitle (% 70) ile karakterize edilir. Askariazis kötü hijyen ve düşük sosyoekonomik koşullardan dolayı tropikal ülkelerde yaygındır. Askariazis bağırsak tıkanıklığı gibi ciddi karın içi komplikasyonlara neden olabilir.

Bu tür hastalarda CT tarama sonuçları bazen klinik bulgulardan farklı olabilir. Hekimler endemic bölgelerde tekrarlayan karın ağrısı ayırıcı tanısında, askariazisi akılda tutmalıdırlar.

Anahtar Kelimeler: askariazis, çocukluk çağı, invajinasyon, kolik karın ağrısı

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INTRODUCTION

Intussusception is a common abdominal emergency in the early childhood. The clinical presentation is characterized by the triad of abdominal colics, red jelly stools (positive in 66% of cases), and a palpable mass (70%). Other symptoms include unspecific abdominal pain or cramps, emesis, lethargy, shock, and dehydration. The peak incidence is in early infancy; about two-thirds of cases occur in the first year of life, but it can also be found in older children (1). Ascariasis is a common infestation in tropical countries because of poor hygiene and low socioeconomic conditions. Although most of the cases of intestinal ascariasis are managed conservatively, some cases need surgical intervention with associated morbidity and mortality (2). The majority of *A. lumbricoides* infections are asymptomatic, patients may present with nonspecific abdominal pain, nausea, vomiting, anorexia, and weight loss. Ascariasis can cause serious intra-abdominal complications such as intestinal obstruction, biliary obstruction, cholangiohepatitis, liver abscess, pancreatitis, acute appendicitis, intestinal perforation, and granulomatous peritonitis (3).

This report documents a case of ascariasis mimicking jejunal intussusception in a 13-year-old girl.

CASE REPORT

A 13-year-old girl, this case was admitted to hospital with symptoms of severe epigastric pain, nausea-vomiting. The symptoms had started weakly three weeks earlier. The vital signs were as follows: blood pressure 115/70 mmHg, pulse 90 beats/min, respiratory rate 20 breaths/min, and temperature 37.2 C. The patient's abdomen had increased bowel sounds and was tender in epigastric area. The remainder of the physical examination was normal. Abdominal ultrasound finding was normal. Plain abdominal graphy had minimally air-fluid levels (Figure 1). The patient was operated after

intussusception has been reported by tomography scanning (Figure 2, 3). During the operation, an obstruction caused by an *Ascaris lumbricoides* mass was determined at the dilated jejunal segment in 25 cm distal to the ligament of Treitz (Figure 4). The worms were manually evacuated from the jejunal loop to the colon. Postoperatively, Albendazole 200 mg 1x2 was given the patient for 3 days. On day second, the worms started to pass out via anal canal (Figure 5). The patient was discharged on day 3. After 2 weeks of Andazole therapy repeated at the same dose. The patient reported passing out around 30 human round worms.



Figure 1. Plain abdominal graphy



Figure 2. Jejunal mass image

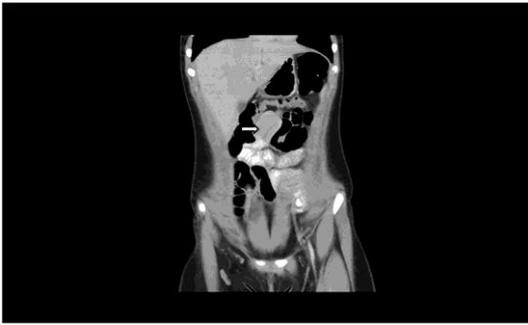


Figure 3. Jejunal mass appearance due to ascariasis



Figure 4. Peroperative jejunal mass appearance due to ascariasis



Figure 5. Ascariasis in stool

DISCUSSION

A. lumbricoides is among the most prevalent parasitic infections in the world. Approximately 25% of the world population, or 1.4 billion people, are infected, and the disease has an annual mortality rate of 20,000–100,000 (4–6). Transmission of the disease is usually fecal-to-oral (hand-to-mouth) and through contaminated food, water, and agricultural products. Transmission can sometimes occur via the inhalation of eggs or swallowing contaminated respiratory secretions (7). The larvae reach the small intestines, most commonly the jejunum, where they mature into adult worms. They live for 10 to 24 months and are capable of producing approximately 240,000 eggs per day 2–3 months after the initial infection. Patients with ascariasis are often asymptomatic or have vague symptoms such as nausea, vomiting, anorexia, abdominal discomfort, or colicky pain. Laboratory findings may reveal mild eosinophilia and microcytic anemia. This was all observed in our patient. Intestinal obstruction is rare, regardless of whether acute with symptoms of ileus or chronic with relatively non-specific symptoms. Abdominal US, upright radiograph, or gastrointestinal CT scan can reveal typical features for the diagnosis of intussusception caused by an ascariasis. Bowel obstruction can be caused by a large worm bolus or even various toxins released by the worm (7–10).

Intestinal obstruction also can be complicated by the development of volvulus, volvulus with gangrene and perforation, intussusception, and appendicitis. Intestinal obstruction is managed conservatively with nasogastric suction, anthelmintic treatment, and fluid-electrolyte replacement. In more serious cases, various surgical procedures like extraluminal manual advancement, enterotomy, bowel resection, and appendectomy are used (11).

In conclusion, it is one of the most common causes of intestinal obstruction in our part of the world and should be kept as first differential diagnosis while evaluating a child with features of intestinal obstruction. Intestinal ascariasis should be included in the differential diagnosis of recurrent abdominal pain, particularly in developing countries. We have reported a case of recurrent abdominal pain, which was finally diagnosed as ascariasis through the results of a CT scan. However, clinics may sometimes be different. Physicians should always keep in mind endemic areas in the differential diagnosis of recurrent abdominal pain.

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