

# *Ascaris lumbricoides* infestation mimics acute intestinal obstruction in a 4-year-old boy

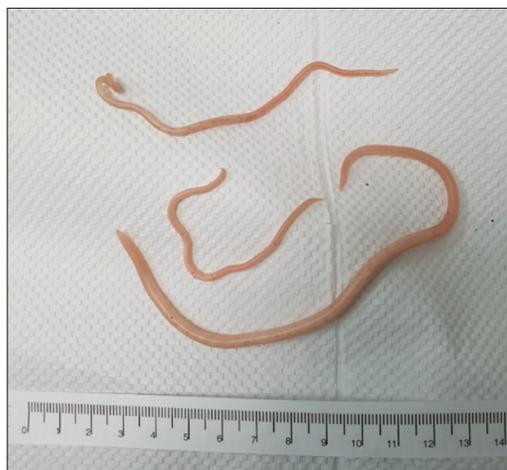
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**A** *scaris lumbricoides* infestation is a worldwide common soil-transmitted helminths infection mainly affecting children in the developing and low socioeconomic status countries where the transmission is by contamination of soil by human feces or use of untreated feces as fertilizer [1]. However, it is rare in Qatar, and most cases have been reported among non-Qatari residents who visited their home country while on vacation. In this report, we presented a case of *A. lumbricoides* infection in a preschool child who arrived in Qatar after a trip to the Gaza strip.

A 4-year-old Palestinian boy who recently came from the Gaza Strip to Qatar was brought to the emergency room by his mother with epigastric pain for 3 days, followed by repeated non-bilious vomiting 6 times in the past 10 h. During the last episode of vomiting, the child expelled three adult *A. lumbricoides* worms with gastric secretion (Fig. 1). Physical examination showed no abnormalities except for mild abdominal distention. A plain abdominal radiograph revealed the presence of large fecal burden throughout the colon with no signs of bowel obstruction. The child was given enema and oral ondansetron and was discharged home on mebendazole and lactulose. The child was followed up 5 days later; he was in good condition with no complaints of abdominal pain, nausea, or vomiting. The mother said that her son began having normal bowel movements and passed 12 *Ascaris* worms within 2 days of receiving treatment. She also mentioned that the patient's brother and sister, who received mebendazole, passed similar worms.

Gastrointestinal (GI) tract infestation with *A. lumbricoides* is a worldwide phenomenon, it is estimated that one billion or more of the world's population, mostly in the third world countries, are infested with the worm [1]. Although a vast majority of cases are asymptomatic, infected patients may present with a potentially severe variety of GI and rarely pulmonary or neurological disturbances [2-4]. The clinical



**Figure 1: One female and two male adult *Ascaris lumbricoides* worms were discharged through the mouth with vomiting**

presentation sometimes mimics surgical conditions, making the diagnosis difficult for junior physicians unfamiliar with this infestation. Our case had acute history of abdominal pain and distension with frequent vomiting; he also had 3-day history of constipation since his arrival from Gaza strip where more than half the population have *A. lumbricoides* [5]. As this infestation is rare in Qatar, these symptoms which mimic acute intestinal obstruction can mislead any physician unfamiliar with this infestation. Fortunately, the patient vomited the worms which solved the dilemma in a short period. Adult worms usually reside in the intestine without causing dangerous complications, however, they may move to other parts of the GI tract when the environment becomes inappropriate for their survival [2]. In our case, constipation most likely causes the worm to migrate to the stomach, irritating it, and eventually resulting in the worm being expelled through the patient's mouth. In conclusion, *A. lumbricoides* should be kept in mind in children with symptoms of mimicking acute intestinal obstruction, after a trip to areas endemic with this infestation.

### Access this article online

Received - 03 February 2022  
Initial Review - 04 February 2022  
Accepted - 07 February 2022

### Quick Response code



DOI: 10.32677/yjm.v1i1.3306

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## REFERENCES

1. Pullan RL, Smith JL, Jasrasaria R, *et al.* Global numbers of infection and disease burden of soil transmitted helminth infections in 2010. *Parasit Vectors* 2014;7:37.
2. Mishra PK, Agrawal A, Joshi M, *et al.* Intestinal obstruction in children due to Ascariasis: A tertiary health centre experience. *Afr J Paediatr Surg* 2008;5:65-70.
3. Ozdemir O. Loeffler's syndrome: A type of eosinophilic pneumonia mimicking community-acquired pneumonia and asthma that arises from *Ascaris lumbricoides* in a child. *North Clin Istanbul* 2020;7:506-7.
4. Zaki SA, Lad V. Encephalopathy as a presenting feature of ascariasis in a child. *Indian J Crit Care Med* 2011;15:63-4.
5. Hamarsheh O, Amro A. Epidemiology of parasitic infections in the West Bank and Gaza Strip, Palestine. *Am J Trop Med Hyg* 2020;102:313-7.

*Funding: None; Conflicts of Interest: None Stated.*

**How to cite this article:** Najm MM, Najm AM, Alkhatib IJ. *Ascaris lumbricoides* infestation mimics acute intestinal obstruction in a 4-year-old boy. *Yemen J Med.* 2022;1(1):53-54.