

## Ascaris exit through the feeding jejunostomy tract: A rare case report

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A 65-year-old male was operated for esophageal carcinoma. Transhiatal esophagogastrectomy with jejunostomy feeding tube was done. Orals were started on the 12<sup>th</sup> postoperative day. The jejunostomy feeding tube was removed on the 20<sup>th</sup> postoperative day. Immediately after removal of the feeding tube, a 10-12 cm ascaris was seen emerging through the jejunostomy tract. Ascaris lumbricoides can cause a variety of complications like intestinal obstruction, perforation, biliary obstruction, pancreatitis, liver abscess, cholangiohepatitis, volvulus, and gangrene, etc. Although the above-mentioned complications have been frequently reported, ascaris exit through the feeding jejunostomy tract is very rare. This case is reported here to emphasize the importance of this complication of wandering ascariasis.

**Key words:** Ascaris, jejunostomy, esophagogastrectomy

### Beslenme jejunostomi traktusundan çıkan ascaris: Nadir bir vaka sunumu

Altımış beş yaşında erkek hasta özofagus karsinomu nedeni ile opere edildi. Hastaya trans-hiatal özofagogastrektomi operasyonu sırasında açılan jejunostomiden beslenme tüpü yerleştirildi. Hastanın oral alımı operasyondan sonraki 12. günde açıldı. Jejunostomi beslenme tüpü operasyondan sonraki 20. günde çekildi. Tipiin çekilmesinden hemen sonra jejunostomi traktusundan 10 – 12 cm uzunluğunda ascarisin dışarı geldiği görüldü. Ascaris lumbricoides intestinal obstrüksiyon, perforasyon, biliyer obstrüksiyon, pankreatit, karaciğer apsesi, kolanjiohepatit, volvulus ve gangren gibi çok çeşitli komplikasyonlara neden olabilir. Bu komplikasyonlar sıklıkla rapor edilmelerine rağmen ascaris'in jejunostomi traktusundan dışarı gelmesi nadir görülen bir durumdur. Bu vaka kaydı ascarisin nerelerde bulunabileceği dikkat çekmek amacıyla sunulmuştur.

**Anahtar kelimeler:** Ascaris, jejunostomi, özefagogastrektomi

### INTRODUCTION

Ascariasis is an important medical, social and economic problem in many underdeveloped countries where public health, sanitation and personal hygiene are at the lowest level (1-3). It can cause a variety of complications like biliary obstruction, pancreatitis, small bowel obstruction, and gangrene, etc. However, to our best knowledge, there has been no previous report in the literature of ascaris travelling through the jejunostomy tract. This is the first reported case of its kind.

### CASE REPORT

A 65-year-old normotensive, nondiabetic male presented with dysphagia to solids for the previous one month. The patient also had a history of weight loss and increased fatigability. Physical examination showed an emaciated elderly man with gross pallor. There was no other finding on his general and systemic examinations.

The patient was investigated. The hemogram showed hemoglobin of 7 g/dl. Kidney function tests, li-

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ver function tests, chest X-ray, and abdominal ultrasonography were normal. Esophagogastroduodenoscopy (EGD) was done, which showed an ulcerative growth 36-38 cm from the incisors, partially occluding the lumen. Biopsy showed a well-differentiated squamous cell carcinoma. Computed tomography (CT) scan of the chest and abdomen showed only thickening in the esophageal wall. There was no liver metastasis.

The patient underwent transhiatal esophagogastrectomy. Feeding jejunostomy tube was added at the end of procedure for postoperative enteral feeding. The patient was placed on intravenous fluids, intravenous antibiotics (cefoperazone sulbactam) and analgesics, and was shifted to the postoperative intensive care unit (ICU). On the 2<sup>nd</sup> day, the jejunostomy feed was started. Intravenous fluids were stopped on the 3<sup>rd</sup> postoperative day and the patient was transferred to a main ward. On the 8<sup>th</sup> postoperative day, dye study was done, which showed no anastomotic leak. Oral feeding was started first with liquids followed by semi-solids. Antibiotics were stopped. The patient was discharged with jejunostomy tube. After one week, the patient presented for follow-up. He was taking an adequate oral diet without difficulty, and it was decided to remove the jejunostomy tube. Just after its removal, a 10-12 cm worm was seen moving through the jejunostomy tract. The patient was administered albendazole 400 mg for three days. The patient has been under follow-up for the last 7 months.

## DISCUSSION

Ascariasis is an important medical, social and economic problem in many underdeveloped countries where public health, sanitation and personal hygiene are at the lowest level (1-3). Infection occurs at all ages, but is most common in children of pre-early school age (1-3). Both sexes are equally affected (1,2). Transmission of ascariasis to humans is feco-oral. Eggs of the parasite are ingested by eating contaminated food. The eggshell is digested by gastric juice, and larvae are released from the eggs. These larvae penetrate the intestinal wall and enter the blood. They are filtered out by the capillaries of the lungs and later break into alveoli, where they mature, ascend the trachea and pass over the epiglottis by cough and then down the esophagus to return to the intestine by swallowing (1-3). Adult worms can reside in the gastrointestinal tract without causing any significant symptoms. However, when the environment in the intestines becomes hostile, such as with inflammation and obstruction, the ascaris will migrate to other less hostile regions, which can lead to serious complications, such as biliary obstruction (1-3,9), cholangiohepatitis (3), liver abscess (2,5), pancreatitis (2,3), acute appendicitis (3,9), intestinal perforation (2,3) and obstruction (1-4,7-9), ascaris empyema (10,11), and granulomatous peritonitis (4,6,9), which may lead to significant malnutrition, morbidity and even mortality (1-3). Our report describes the very rare case of ascaris exiting through the jejunostomy tract.

## REFERENCES

- Mahmoud AA. Intestinal nematodes. In: Mandell GI, Douglas RG, Bennet JE, eds. *Principles and practice of infectious diseases*. Edinburg: Churchill Livingstone, 1990; 2137-8.
- Surrendran N, Paulose MO. Intestinal complications of round-worms in children. *J Paediatr Surg* 1998; 23: 931-5.
- Markell EK, Voge M, John DT. The intestinal nematodes. In: Ozmat S, ed. *Medical parasitology*. Philadelphia: WB Saunders, 1992; 261-93.
- De Sa AE. Surgical ascariasis. *Indian J Surg* 1996; 28: 182-90.
- Saw HS, Somasundram K, Kamath R. Hepatic ascariasis. *Arch Surg* 1974; 108: 733.
- Mylvaganam C, Pannabokke RG. Extraintestinal ascaris granuloma. *J Trop Med Hyg* 1969; 72: 98.
- Cole GJ. Surgical manifestations of *Ascaris lumbricoides* in the intestine. *Br J Surg* 1965; 52: 444-7.
- Louw JH. Abdominal complications of *Ascaris lumbricoides* infestation in children. *Br J Surg* 1966; 53: 510-21.
- Bernado O. Surgical complications of ascariasis. *World J Surg* 1991; 15: 222-7.
- Sen MK, Chakrabarti S, Ojha UC, et al. Ectopic ascariasis: an unusual case of pyopneumothorax. *Indian J Chest Dis Allied Sci* 1998; 40(2): 131-3.