

Wandering Ascaris Coming Out Through the Abdominal Wall

Mohd L Wani, Ajaz A. Rather, Fazl Q. Parray, Abdul G. Ahangar, Akram H. Bijli, Ifat Irshad, Nayeem-Ul-Hassan, Tahir S. Khan

Department of General Surgery/CVTS and Allied Specialties, Sher-i-Kashmir Institute of Medical Sciences, Srinagar, J and K, India

Correspondence to:

Dr. Mohd Lateef Wani,
Department of CVTS, Sher-i-Kashmir
Institute of Medical Sciences,
Srinagar, J and K, India.
E-mail: latifs_dr@yahoo.com

Date of Submission: Dec 03, 2011

Date of Acceptance: Mar 30, 2012

How to cite this article: Wani ML, Rather AA, Parray FQ, Ahangar AG, Bijli AH, Irshad I, Nayeem-Ul-Hassan, Khan TS. Wandering ascaris coming out through the abdominal wall. Int J Prev Med 2013;4:720-2.

ABSTRACT

A rare case of ascaris coming out through the anterior abdominal wall is reported here. A 40-year-old female had undergone dilatation and curettage by a quack. On the second day she presented with features of peritonitis. She was explored. Resection anastomosis of the ileum was done for multiple perforations of the ileum. Patient developed a fistula in the anterior abdominal wall which was draining bile-colored fluid. On the 12th postoperative day a 10-cm-long worm was seen coming out through the fistulous tract which was found to be *Ascaris lumbricoids*. *Ascaris lumbricoids* can lead to many complications ranging from worm colic to intestinal obstruction, volvulus, peritonitis, pancreatitis, cholangiohepatitis, liver abscess and many more. Worm has been reported to come out through mouth, nostrils, abdominal drains, T-tubes etc. But ascaris coming out through the anterior abdominal wall is very rare hence reported here.

Key words: Ascaris, bile, perforation

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. Ascaris has been reported to come out through chest tube, Nasogastric tube, T tube etc. We report this case in which ascaris came out through anterior abdominal wall.

CASE REPORT

A 40-year-old female had undergone dilatation and curettage for missed abortion by a quack. On the second day she developed abdominal pain in the periumbilical area which later on involved the whole abdomen. Pain was followed by abdominal distension and fever. There was no history of nausea, vomiting, hematemesis, malena. There was history of anorexia.

Physical examination revealed an ill-looking female with pulse of 100 bpm, blood pressure of 100/60 and temperature

of 100°F. Abdominal examination showed guarding and rebound tenderness all over. Chest and cardiovascular examination was essentially normal.

Chest X-ray of both domes of the diaphragm showed gas under the diaphragm. Abdominal sonography showed free fluid in the peritoneal cavity. A diagnosis of peritonitis was made and patient was explored. Operative findings were:

1. Four perforations in the ileum in a segment of about 15 cm.
2. About 300 ml of dirty bile-stained fluid in the peritoneal cavity.
3. Pus flakes were present all over.

Resection anastomosis of the ileum was done and patient was put on Ryle's tube, IV fluids, and IV antibiotics (ceftriaxone salbactam and tinidazole). Ryle's tube was removed on the third postoperative day. Patient was shifted to liquid orals on the fifth postoperative day. Patient developed pus discharge from wound. Swab culture sensitivity was sterile. Skin sutures were removed and pus was drained. Wound was dressed daily and healing was achieved by secondary intention. On the 10th postoperative day patient developed a fistula just below the umbilicus which drained a small amount of bile-stained fluid, about 20 ml/day. On the 12th postoperative day a 10-cm-long worm was seen coming out through the fistulous tract. Discharge from the fistula decreased subsequently. Fistula closed of its own after three days. Wound healed completely by secondary intention. Patient was administered 400 mg of Albendazole for three consecutive days. Patient is on follow-up for the last six months.

DISCUSSION

Ascaris lumbricoides is the most common intestinal parasite.^[1] It affects about 25% of the world's population in third-world countries. Maximal incidence is in the preschool and school-age groups.^[2-4] Males and females are equally affected.^[2,3] Humans are affected by ingestion of eggs from contaminated food, water and infected soil. Eggs reach the duodenum where shell is dissolved and larva comes out. Larvae penetrate the intestinal wall and reach the bloodstream. They are filtered out by capillaries of the lung where they break alveoli. They ascend the trachea and pass over



Figure 1: Ascaris coming out through the anterior abdominal wall

the epiglottis by cough. They are later swallowed and reach back to the intestinal lumen.^[2-4] The adult worm lives in the jejunal lumen. Adult worm can cause mechanical intestinal obstruction,^[2-8] or it can migrate to some other sites causing variety of complications like pancreatitis,^[3,4] biliary obstruction,^[2,4,8] cholangiohepatitis,^[4] liver abscess,^[3,9] appendicitis,^[4,8] intestinal perforation,^[3,4] granulomatous peritonitis,^[5,8,10] and ascariis empyema.^[11,12] Agarwal *et al.*,^[13] reported a case of ascariis coming out through a ventriculoperitoneal shunt. Kar *et al.*,^[14] reported a case of ascariis coming out through a T-tube tract. All these complications can lead to significant morbidity and mortality. Ascariis coming out through the anterior abdominal wall is very rare, hence reported here [Figure 1].

REFERENCES

1. Rao PL, Sharma AK, Yadav K, Mitra SK, Pathak IC. Acute intestinal obstruction in children as seen in North West India. *Indian Pediatr* 1978;15:1017-20.
2. Mahmoud AA. Intestinal nematodes. In: Mandell GI, Douglas RG, Bennet JE, editors. *Principles and practice of infectious diseases*. Edinburg: Churchill Livingstone; 1990. p. 2137-8.
3. Surrendran N, Paulose MO. Intestinal complications of round-worms in children. *J Paediatr Surg* 1998;23:931-5.
4. Markell EK, Voge M, John DT. The intestinal nematodes. In: Ozmat S, editor. *Medical parasitology*. Philadelphia: WB Saunders; 1992. p. 261-93.
5. De Sa AE. Surgical Ascariasis. *Indian J Surg* 1996;28: 182-90.

6. Cole GJ. Surgical manifestations of *Ascaris lumbricoides* in the intestine. *Br J Surg* 1965;52:444-7.
7. Louw JH. Abdominal complications of *Ascaris lumbricoides* infestation in children. *Br J Surg* 1966;53:510-21.
8. Ochoa B. Surgical complications of ascariasis. *World J Surg* 1991;15:222-7.
9. Saw HS, Somasundram K, Kamath R. Hepatic ascariasis. A case report and review of the literature. *Arch Surg* 1974;108:733-5.
10. Mylvaganam C, Pannabokke RG. Extra-intestinal ascaris granuloma. *J Trop Med Hyg* 1969;72:98-100.
11. Sen MK, Chakrabarti S, Ojha UC, Daima SR, Gupta R, Suri JC. Ectopic ascariasis: An unusual case of pyopneumothorax. *Indian J Chest Dis Allied Sci* 1998;40:131-2.
12. Zamora Almeida O. Localization of *Ascaris lumbricoides* in the thoracic cavity. Report of a case. *Rev Cubana Med Trop* 1976;28:71-5.
13. Agarwal P. Round worm migration along ventriculoperitoneal shunt tract: A rare complication. *J Postgrad Med* 2000;46:37-8.
14. Kar M, Saha I, Kar JK, Mukhopadhyay M. Wandering ascaris coming out through the T-tube tract: Rare occurrence. *J Indian Med Assoc* 2004;102:225.

Source of Support: Nil **Conflict of Interest:** None declared.