Esophageal Ascariasis with Retrosternal Chest Discomfort

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Abstract
Ascariasis is one of the most well known helminthic parasite affecting humans. Esophageal ascariasis is extremely rare. We present a case of esophageal ascariasis manifesting as retrosternal chest discomfort.

Introduction
Ascariasis is one of the well-known helminthic parasites affecting humans and ascariasis remains common with >1.2 billion infections globally. In clinical observation majority of cases are intestinal ascariasis. Esophageal ascariasis is extremely rare. We present a case of esophageal ascariasis infestation manifesting as retrosternal chest discomfort.

Case Report
30 yr old female presented to our hospital with complaints of retrosternal chest discomfort, radiating to left shoulder since 2 months increasing since past 3 days chest discomfort was associated with nausea, no episodes of vomiting. Vitals were stable and no signs of anemia. Systemic examination was normal. Hemoglobin was 8.6 gm%.

Total leukocyte count was 11,800 with neutrophils 68%, lymphocytes 18%, eosinophils 10%, monocytes 02%. Chest skiagram was normal. 12-lead ECG was normal. 2D echocardiography was normal. Upper GI endoscopy revealed live worm of ascariasis in proximal part of stomach and prolapsing into esophagus (Figure 1). Removal of worm was done. Patient did not give any history of passing worm in stools. The patient was treated with albendazole and Proton pump inhibitor. Patient clinically improved over 4 weeks.

Discussion
Ascariasis is a widely distributed parasitic infection. Demonstration of round worms in the esophagus is extremely unusual. Thomas et al have reported presence of ascars in stomach & esophagus as an exceptional endoscopic finding.³

When the living environment becomes unfavorable such as gastrointestinal disease, hunger, fever, failed deworming therapy or impaction of a mass of worms in the intestinal lumen, adult Ascaris will try to enter into any orifice and advance into any channel leading off from it. Then various complications are encountered. The worms commonly enter the biliary or pancreatic ducts, causing cholecystitis, cholangitis, liver abscess, and pancreatitis. Esophageal ascariasis is extremely rare, because the esophagus is not normal habitat of Ascaris as it prefers an alkaline environment and rarely travels from the jejunum and duodenum to the stomach (an acid environment) and then to esophagus. Our patient did not report any complaints of dysphagia or any alteration in bowel habits.

In a case reported in India a 15-year-old male child presented with two months history of recurrent abdominal pain, fever and easy fatiguability. Demonstration of worms was done in esophagus on barium study.²

In our patient no significant gastrointestinal symptoms were elicited. Esophageal ascariasis is a rare cause of chest pain. This possibility must be borne in mind when one comes across a case of chest pain and avoid misdiagnosis in future.

References

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Fig. 1: Ascaris in esophagus