

## Case Blog

### Title: *Ascaris lumbricoides* - From Bedside to Benchside

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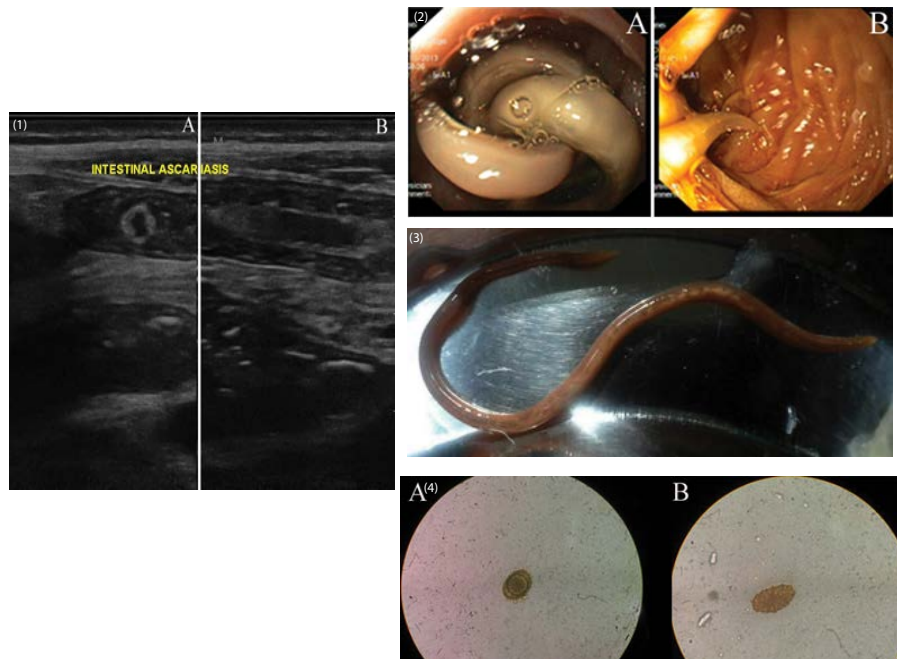


Figure 1: Sonography of Abdomen.

Figure 2: Upper GI endoscopy.

Figure 3: Endoscopic snare and worm removal.

Figure 4: Stool examination.

38 years old male farmer presented with pain abdomen for six days associated with vomiting and abdomen distension. Patient was conscious cooperative with pulse-106/minute, BP-110/80 mm Hg. No pallor, icterus was present. Abdomen was distended and tender. Respiratory system, Cardiovascular system examination was normal. Blood report revealed a TLC of 13,000/cumm predominantly neutrophilic, Hb-13.2 gm%, ESR-66 mm/hr. Liver function test was normal. Straight X ray abdomen revealed dilated gas filled bowel loops. Sonography of abdomen revealed presence of intestinal ascariasis with “Railway track sign” and “Bull’s eye sign” (Figure 1A and 1B). The patient was given conservative treatment in the form of bowel rest, intravenous fluids and painkillers. After 24 hours of admission, pain subsided. Upper GI endoscopy showed worm movement in duodenum (Figure 2B and 2B) and subsequently with the help of endoscopic snare a worm was taken out (Figure 3). The patient responded to conservative management and on the second day of admission he passed stool. Stool examination revealed presence of fertilized and unfertilized eggs of ascariasis (Figure 4A and 4B). Anthelmintic was administered in the form of albendazole and discharged. *Ascaris lumbricoides* is one of the commonest helminthic infections worldwide. Adult worms may be present in gastrointestinal system, hepatobiliary system or peritoneal cavity causing a wide range of clinical manifestations [1]. Straight X ray abdomen can reveal moderately distended small bowel loops, sometimes multiple air-fluid levels. Sonography of abdomen confirms the diagnosis of ascariasis by the presence of the typical signs of “bull’s eyes” in transverse section and “railway track” appearance in longitudinal sections [2]. The finding of fertile or infertile eggs or an adult worm in the feces may sometimes serve as only an indicator of ascariasis lumbricoides infestation [3].

### Points

- 1) *Ascaris lumbricoides* may present with complications like intestinal obstruction, pancreatitis, intussusceptions,

cholangiohepatitis and pneumonitis.

2) Presence of fertilized or unfertilized eggs or adult worm in faeces is diagnostic of roundworm infestation.

3) Presence of “Bull’s eye sign” and “Tram track sign” in intestine on sonography of abdomen is radiological evidence of intestinal ascariasis.

4) Complication is treated both conservatively and surgically depending on clinical presentation. Endoscopy is also helpful sometimes. Antihelminthic treatment is usually initiated after resolve of acute symptoms.

#### References

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3. Pawlowski ZS. Ascariasis (1995) In: Warren KS, Mahmoud AA, editors. *Tropical and Geographical Medicine*. (2nd edn). McGraw Hill: USA: 369-378.