

Case Reports

Enterobiasis of anterior rectal wall mimicking a tumour-like lesion

Introduction

Enterobius vermicularis is the most common helminth infecting man with a host range restricted to humans.¹ The parasite is not transmitted by arthropod vectors or intermediate hosts but directly from the parasitized subject to a healthy subject by means of infected hands, food or fomites. Indirect transmission by air has also been noted, wherein suspended microscopic eggs get inhaled with dust.² True granulomas caused by *Enterobius vermicularis* with their ova in internal genitalia, pelvis and appendix are well documented.^{3–5} The lesion described here is unique in its location and clinical presentation.

Case report

A 33-year-old male presented to our surgical outpatient department with complaints of bleeding per rectum since one month. He also gave history of chronic intermittent diarrhoea. Per rectal digital examination revealed a firm tender mass in the anterior rectal wall. Proctoscopy showed second degree haemorrhoids and an irregular nodular mass 3 × 2 cm in size, in the anterior rectal wall.

Result of routine stool examination and barium study were normal. The mass was removed completely with a surgical diagnosis of either tuberculoma or carcinoma. Specimen sent

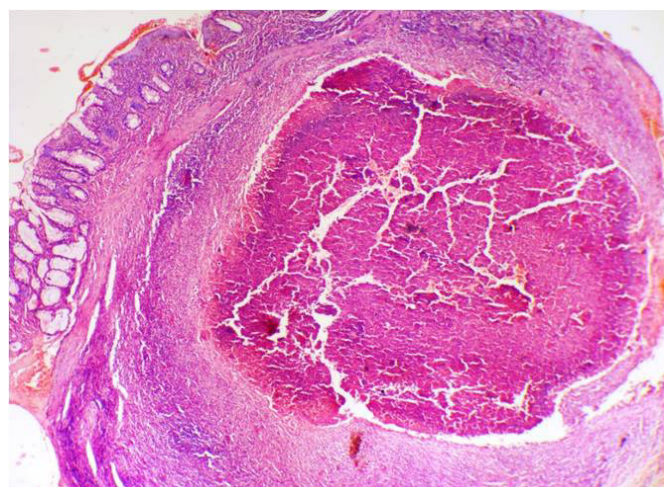


Figure 1: Submucosal granuloma with extensive areas of necrosis (hematoxylin and eosin, 40x)

for histopathology included two bits of grayish-white nodular tissue measuring 2.5 cm in diameter.

Histopathology revealed a submucosal granuloma extending up to the subserosa (**Figure 1**). Extensive areas of necrosis along with large number of eosinophils and neutrophils were observed in the periphery while an amorphous material occupied the centre containing numerous oval eggs bearing a thick cuticle and measuring approximately 20 × 50 μm in size. The ova were morphologically characteristic of *E. vermicularis* and were accompanied by the uterine wall remnants of the nematode (**Figures 2 & 3**).

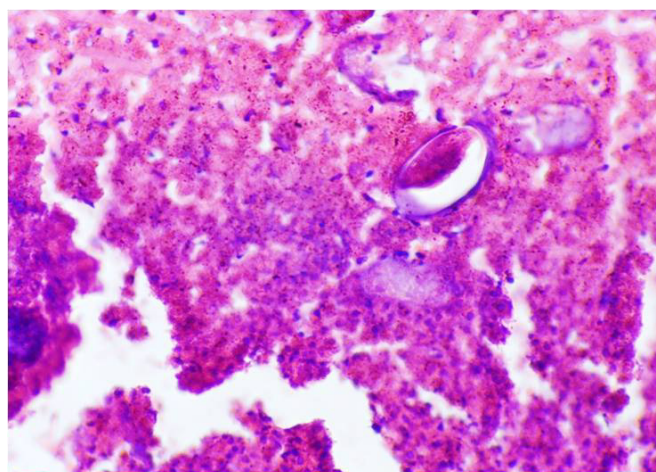


Figure 2: *Enterobius vermicularis* ova with thick cuticle, measuring 20 × 50 μm in size, over a background of eosinophils and neutrophils (hematoxylin and eosin, 100x)

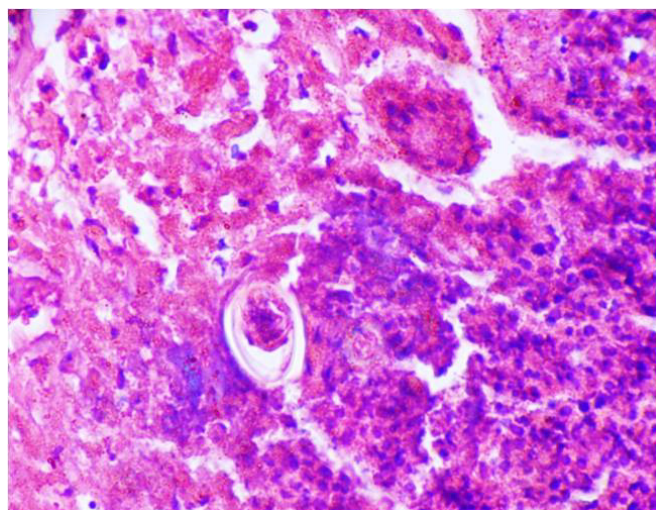


Figure 3: Section showing uterine wall of *Enterobius vermicularis* containing ova and multiple degenerate ova scattered in the background (hematoxylin and eosin, 100x)

Discussion

We hypothesize that this unusual presentation in our case was caused by the aberrant migration of a gravid female *E.*

vermicularis nematode into the depths of the patient's rectal wall. The worm eventually got trapped and died in the dead-end fistula, releasing its ova, degradation products and inciting a local granulomatous inflammatory reaction.⁶⁻⁹

E. vermicularis-induced granulomas can be asymptomatic or they may present with bleeding per rectum and peritoneal adhesions. The differential diagnosis of such lesions in these locations includes, sarcoidosis, tuberculosis, Crohn's disease and foreign body reaction due talc, silicon or any surgical material.^{10,11} Further, *E. vermicularis* cases of rectal granuloma have been rarely reported, as compared to appendicular and peri-anal lesion.¹²

Our report presents an unusual case of *E. vermicularis* granuloma and highlights the importance of considering helminthic parasitosis as a differential diagnosis for atypical gastrointestinal lesions.

SUDHASHMITA RAUTA
U RAMESH
SESHA DEEPTI
PVB RAMLAKSHMI

Correspondence: Dr. Sudhasmita Rauta
Department of Pathology,
Maharaja Institute of Medical Science, Vizianagaram
NTR University, Andhra Pradesh, India
Email: drsudhasmita@gmail.com

References

1. Cram EB. Studies on oxyuriasis XXVIII. Summary and conclusions. *Am J Dis Child*. 1943;**65**:46–59.
2. Hugot JP, Reinhard KJ, Gardner SL, Morand S. Human enterobiasis in evolution: origin, specificity and transmission. *Parasite*. 1999;**6**:201–8.
3. Anthony PP, McAdam IW. Helminthic pseudotumours of the bowel: thirty-four cases of helminthoma. *Gut*. 1972;**13**:8–16.
4. Aschoff L. Appendicopathia oxyurica. *Med Klin*. 1913;**9**:249–51. Quoted by Symmers W St C. Pathology of oxyuriasis. *Arch Path*. 1950;**50**:475–516.
5. Chomet B. Oxyuris vermicularis infection of the wall of fallopian tube. *Arch Pathol*.**34**:742–4.
6. Dundas KC, Calder AA, Alyusuf R. Enterobius vermicularis threadworm infestation of paraovarian tissue in a woman who has had a hysterectomy. *Br J Obstet Gynaecol*. 1999;**106**:605–7.
7. Erhan Y, Zekioglu O, Ozdemir N, Sen S. Unilateral salpingitis due to enterobius vermicularis. *Int J Gynecol Pathol*. 2000;**19**:188–9.
8. Knuth KR, Fraiz J, Fisch JA, Draper TW. Pinworm infestation of the genital tract. *Am Fam Physician*. 1988;**38**:127–30.
9. Smolyakov R, Talalay B, Yanai-Inbar I, Pak I, Alkan M. Enterobius vermicularis infection of female genital tract: a report of three cases and review of literature. *Eur J Obstet Gynecol Reprod Biol*. 2003;**107**:220–2.
10. McDonald GS, Hourihane DO. Ectopic Enterobius vermicularis. *Gut*. 1972;**13**:621–6.
11. Bijlmer J. An exceptional case of oxyuriasis of the intestinal wall. *J Parasitol*. 1946;**32**:359–66.
12. Avolio L, Avoltini V, Ceffa F, Bragheri R. Perianal granuloma caused by Enterobius vermicularis: report of a new observation and review of the literature. *J Pediatr*. 1998;**132**:1055–6.

Treating ascites with a Foley's catheter in a child

Introduction

Ascites in childhood can have several etiologies.¹ Common causes include hepatobiliary, gastrointestinal, cardiac and genitourinary conditions. We present here an unusual case of urinary ascites in a child. To the best of our knowledge this is the first case of urinary ascites reported from India.

Case report

A 14-year-old girl presented with the history of pain and progressive distension of abdomen for seven days. The pain started in the supra-pubic region and became diffuse over the next two to three days. There was also a history of oliguria for three to four days. She gave no history of trauma or any other significant medical history. On examination, her vitals were stable and she had a diffusely distended, tense abdomen with fluid thrill. An erect X-ray abdomen did not reveal any air-fluid

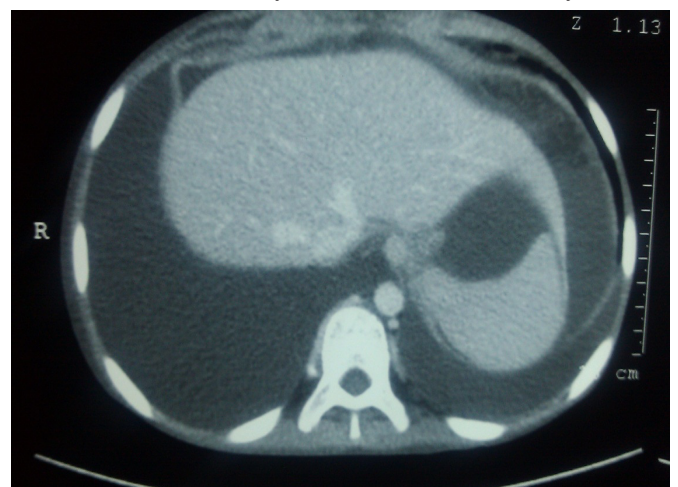


Figure 1: Contrast enhanced CT scan abdomen showing free fluid in the abdomen