# Rare Tapeworm segments in 12 years old age girl Case report

Ahmed Gaffer<sup>1</sup>

<sup>1</sup>Alzaiem Alazhari University

January 18, 2023

#### Abstract

ABSTRACT Intestinal cestode(tapeworm) is characterized by multisegmented, scolex, and absence of digestive tracts as appears in our segments, we reported nine segments of tape worm with, scolex, neck, 13-17 uterus branch, and scorpion like tail.

#### 1. Introduction and literature review

Intestinal trematode is associated with poor sanitation (freshwater, soil-transmitted helminth, the prevalence is predominated in Sub-Saharan African countries, Asia followed by Latin America AND Caribbean counties(2) (3). It is estimated that in 2006 181 million school-age children are infected with one or more worms(4). A recent survey in Sudan estimated the prevalence of intestinal helminth as 5.47% out of 105,176 students screened.

## Case report

A 12-year-old Sudanese girl come to our clinic at 2022 presented with chronic diarrhea (4-5) times per day for more than one year she doesn't diagnose as she has intestinal trematodes, On physical examination, she has a good appetite, abdominal pain, after meals quick needs a bath for defecation, she appears pale and underweight. Laboratory investigation showed normal white cell count of 4500/cmm, and mild anemia Hb 9g/dl the stool was requested for examination, the stool loose contains large particles seen macroscopically as undigested food. Two separate techniques as available in our lab, direct saline wet preparation and formal ether concentration technique was performed. on direct wet preparation examined firstly with low power field a nine trematode segments with scolex, neck, (13-17) uterus branch, scorpion-like tails, were seen accidentally in one field figure (1). On formal ether concentration technique there is no eggs of any parasite but many starch cells were showed, and yeasts over growth. The patient was treated with 400 mg mebendazole immediately and after one week, and come for follow-up after one month and there is no segments nor eggs, she appears well and she start tonics for anaemia.

### Discussion

Intestinal cestode(tapeworm ) is characterized by multisegmented, scolex , and absence of digestive tracts (1) as appears in our segments, but there is no feature of eggs which all times the feature of proglottid segments, In our case the patient had to get daily fresh water without treatment, she had eaten uncooked intestinal parts of cows as rituals in the village (at the wedding) all these factors predisposing to infection .but we didn't identify the exact type of helminth because there is no staining and we exclude the Tanea spp which the segment is large and contain eggs. These segments were first shown and not common in parasitology atlas. Our finding needs further genetic testing to identify specific parasite .

## Conclusion

Intestinal tapeworm is associated with poor sanitary conditions treatment of fresh water and avoid undercooked meat to protect the children from helminths infections

# Ethical approval

Written informed consent was taken from the father of the girls to publish this report.

## Conflicts of interest

There is no conflict of interest

Figure (1) Nine segments of intestinal trematode with low power field object 10



## References

- 1. GA C. Helminths: Structure, Classification, Growth, and Development. In: S B, editor. Medical Microbiology [Internet]. 4th editio. University of Texas Medical Branch at Galveston: Galveston; 1996. Available from: https://www.ncbi.nlm.nih.gov/books/NBK8282
- 2. Brooker S, Clements AC B DA. Global epidemiology, ecology and control of soil-transmitted helminth infections. Adv Parasitol. 2006;62:221–261.
- 3. . de Silva NR, Brooker S, Hotez PJ, Montresor A, Engels D SL. Soil-transmitted helminth infections: updating the global picture. Trends Parasitol. 2003;19:547–551.
- 4. Hotez PJ KA. Neglected tropical diseases in sub-saharan Africa: review of their prevalence, distribution, and disease burden. PLoS Negl Trop Dis. 2009;3:e412.