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Scarabiasis – A Rare Disease with a Rare Presentation

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ABSTRACT

Scarabiasis is an ectoparasitic infestation of gastrointestinal tract by so called “Dung beetle”. It is a temporary infestation, mainly by early stages of development of beetle and the adult beetle flies away from the anus while defecation. Presenting a case of Scarabiasis which presented with rhinitis and constipation, which are two symptoms not yet reported, associated with this infestation.

Key words: Scarabiasis, GIT Infestation, Constipation, Beetle

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INTRODUCTION

Dung beetle infestation is common in tropical countries like India (north-east) [1], Sri Lanka [2]. There are some reported cases as mentioned in the literature from as early as 1976 [3] from Kerala (South India), and also recently from Tamil Nadu [4]. Dung beetle belongs to Scarabaeidae family. It is useful in making the soil more fertile as it rolls out very small pieces of cow dung and stores it by burying it in different spots thus spreading the organic manure and helping in nutrient recycling [5]. The beetle can survive in that mass for the whole life. Once it infects the intestine they can complete the whole life cycle in the human intestine as the beetle adapts to the medium here which is somewhat similar to its natural habitat [2]. The mode of infestation is still a controversy. Most suggested one is that, the larvae of the beetle crawling in through the unprotected anus of the naked child playing in the infected soil and cow dung mixture. Another view is that adult beetle climbing the anus at the gravid stage [2] and laying eggs inside, which later develops into adult beetle and flies away. Faeco-oral route of egg getting into the intestine cannot be ruled out [1].

Usual symptoms of the disease are presence of beetle in the stools or a swarm of beetle flying away from the anus during defecation. One case report [4] shows presentation with pain abdomen, loose stools, vomiting. Study by [1] shows abdominal pain as a symptom. In this study 38% of children showed high Eosinophil count. The parasite is a pure Ectoparasite as evidenced by colonoscopy done in a previous case which showed no mucosal lesions [4]. The suggested treatment is to clean the bowel with normal saline purgatives [1, 4].

CASE REPORT

A 7 month old male child of weight 7kg reported to our clinic with complaints of nasal discharge for 1 week. The discharge was non-purulent and there was no associated cough or fever. The child was having an absolute Eosinophil count of 846/ cu mm. He was prescribed Anti histaminic drugs. After 2 weeks the child presented with constipation for 5 days. He was never constipated before. There was no abdominal pain or abdominal distention and bowel sounds were normally heard. Per rectal examination revealed fecal staining of the fingers. He was prescribed Normal saline enema. To our surprise, around sixty live black beetles of length 0.5 Cm to 0.7 cm emerged mixed with the stools. Saline enema was repeated for another two days, on the third day the bowel was clear of beetles. His rhinitis also subsided in about 2 days. The examination of the beetle revealed that it belonged to "Coprophagous beetle" of order- Coeloptera, Suborder- Polyphaga, Series-Scarabieformie, Family- Scarabidae,[5].

DISCUSSION

This child presented with constipation, rather than with the usual presentation of diarrhoea and abdominal pain as reported earlier [2, 4]. This may be due to the beetle load of around 60 which blocked the intestinal passage. The parasite would have caused the rhinitis as evidenced by increase in Absolute Eosinophil count.

The family is from an agricultural area in Kerala, main plantation being Rubber plantations. They live in a properly built house, but the child used to sleep in the Open Veranda during the day time without proper undergarments. Even though the child is well nourished the hygienic condition was poor. He was kept naked most of the day and used to play in the soil. Being an agricultural community the soil getting mixed with cow dung is common, as they used to store cow dung for agriculture purpose.

Scarabiasis is a condition in which beetle infested the lower intestine. It can also infest the urinary tract [1]. Loss of appetite, diarrhoea and abdominal pain are the common symptoms [2,4]. It can irritate the nasal epithelium and also the eyes [1]. Usually few beetles are passed in the stools in different occasions over a period of time [4] or a group of beetle flies away during defecation with a “hizzing” sound and aerial display upsetting the child and the family [2].



Figure 1- The beetle collected from the stool of the patient

Treatment suggested ,apart from saline purgatives is Metronidazole [4]. Prevention is by proper clothing and not allowing the child play in contaminated soil.

Conclusion

The idea of presenting the case is to highlight the two hitherto not reported symptoms and also to highlight the need for maintaining proper hygiene in preventing this “scary” disease.

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