

REFERENCES

1. Peter M, Sippell WG. Congenital hypoadosteronism: the Visser-Cost syndrome revisited. *Pediatr Res* 1996; 39: 554-560.
2. Peter M, Partsch CJ, Sippell WG. Multisteroid analysis in children with terminal aldosterone biosynthesis defects. *J Clin Endocrinol Metab* 1995; 80: 1622-1627.
3. Lee PD, Patterson BD, Hintz RL, Rosenfeld RG. Biochemical diagnosis and management of corticosterone methyl oxidase type II deficiency. *J Clin Endocrinol Metab* 1986; 62: 225-229.
4. Picco P, Garibaldi L, Cotellessa M, DiRocco M, Borrone C. Corticosterone methyl oxidase type II deficiency: a cause of failure to thrive and recurrent dehydration in early infancy. *Eur J Pediatr* 1992; 151: 170-173.
5. Portrat-Doyen S, Tourniaire J, Richard O, Mulatero P, Aupetit-Faisant B, Curnow KM, *et al.* Isolated aldosterone syntase deficiency caused by a simultaneous E198D and V386A mutations in the CYP11B2 gene. *J Clin Endocrinol Metab* 1998; 83: 4156-4161.

Scarabiasis

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ABSTRACT

Scarabiasis is a condition where beetles temporarily infest the digestive tract and the scarabes are identified in the "fly away" from the anus at the time of the defecation. This article highlights this rare problem of scarabiasis in a 4 year old girl that responded to bowel cleansing and personal hygienic measures.

Key words: *Dung beetles, Scarabiasis.*

INTRODUCTION

Scarabiasis is a condition where beetles temporarily infest the digestive tract and this disease is seen in children living in tropical countries but is rarely reported. We herewith report a case of scarabiasis in a 4 year old girl.

CASE REPORT

A 4 year-old girl was referred from a village with a history of passing live beetles per rectum. The beetles were black in color and about 0.5 to 0.75 cm in size. The child had passed about 8 beetles during 3 episodes spread out over a 3 month period. She had

mild periumbilical abdominal pain associated with occasional loose stools, vomiting and poor appetite. There was no history of bleeding per rectum or mucorrhea, no fecal incontinence or fecal soiling, no perianal ulcers or itch and no fever, abdominal distension, rash or wheeze. She was given a course of metronidazole for her symptoms and since the presentation was unusual, she was referred to our center.

The family lived in a small house with cemented flooring and the child slept on bed and at times on the floor. She was an active child and often played without her underclothes in the portico of her house which was facing the road. Occasionally during the daytime she slept on the elevated cement slab in the portico. In the neighborhood, cows and cow dung was a common sight as the neighbors residing opposite her house raised cattle for domestic purposes.

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CASE REPORTS

On examination she was a cheerful child, not pale, without scratch marks, skin lesions or significant lymphadenopathy. Her systemic examination was normal. Perianal and rectal examination was normal. The external anal sphincter seemed a little lax. Complete blood counts, ESR, stool examination for parasites and ultrasound abdomen were essentially normal. With this history of passing probable dung beetles, a diagnosis of Scarabiasis was made. One beetle which was captured was sent to the Department of Veterinary Parasitology Laboratory, Chennai and identified as “*Coprophagous* beetle” (**Fig. 1**). She was given bowel cleansing with polyethylene glycol and colonoscopy was done which was normal. Since she also had vomiting, upper gastrointestinal endoscopy was also done. She was then given oral polyethylene glycol once a day for 5 days and the parents were advised regarding sleeping habits, personal hygiene and wearing tight underclothes. She is doing well on follow-up.

DISCUSSION

Scarabiasis or Canthariasis or beetle disease is a condition where beetles temporarily infest the digestive tract(1). Dung beetles belongs to the scarab family of beetles and enjoyed a sacred status among the ancient Egyptians and were designated as the god

of the rising sun since they removed the dirt from the earth and the dung ball which they rolled was compared to the sun. These beetles play a useful role in agriculture by burying and consuming dung, thereby improving the nutrient cycling and soil structure(2). The adult beetle occasionally invades the gastrointestinal and the urinary tracts and rarely the nose and eyes also gets infested by the larva causing severe irritation. The proposed possibility of human infection is the entry of the larvae through the rectum and its development in the colon into adult beetles which then escape and fly out of the rectum. It is also reported that a naked busy toddler grubbing in the polluted soil may attract the attention of adult beetles which may enter the rectum while in the business of oviposition(3). The beetles are ectoparasites and hence do not invade the mucosa as evidenced by the normal colonoscopy findings in our case. This disease is seen in children living in tropical countries but is rarely reported. The suggested treatment is metronidazole and saline purgatives for killing the larvae(1).

This case is being reported not only for its rarity but to spread the awareness of this entity. Personal hygiene, clean environment and wearing protective clothes during sleep will go a long way to prevent this “scary disease”



FIG 1. Adult *Coprophagous* beetle.

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REFERENCES

1. Chakravorty K. Live beetles buzz out of baby's body. Available from http://www.telegraphindia.com/1030627/asp/silguri/story_2108388.asp. Assessed July 29, 2007.
2. Aisthorpe J. Dung beetles - Biology and life cycles. Available from: URL: <http://www2.dpi.qld.gov.au/beef/13129.html>. Accessed July 29, 2007.
3. Rajapakse S. Beetle marasmus. *BMJ* 1981; 283:1316-1317.