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CASE REPORT

FASCIOLOPSIS BUSKI IN A 15 YEARS OLD GIRL IN KOLKATA: A CASE REPORT

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ABSTRACT

In India, Fasciolopsiasis has been reported mainly from Bihar, Uttar Pradesh and Maharashtra (Raj, 2007). Only few sporadic cases have been reported ever since from the remaining states (CD Alert, 2005). We are reporting a case of Fasciolopsiasis in which the patient had vomited out an adult worm of Fasciolopsis buski which is quite an unusual presentation.

Key words:

Fasciolopsiasis,
Metacercaria,
Worm,
Flukes.

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INTRODUCTION

The Case

A 15 years old girl had reported in our Helminthology clinic with the following complaints

- Pain in the abdomen since last 4 months.
- Altered bowel habits since last 2 months.
- Loss of appetite and intolerable nausea since last 1 month.
- On the day of attending in our clinic she vomited out a fleshy worm like substance which she brought with her.

Clinical Examination

Height : 149cms.
Body weight : 24kgs.
Arm Circumference : 11cms.
Chest Circumference : 40cms.
Pallor : +++.

Cachexia: +++
Oedema : No such.

In our laboratory we immediately transferred the worm into a glass petridish. On examination the worm was found to be dorsoventrally flattened, reddish brown in color, had both oral and ventral suckers and cephalic cone was absent. The worm was stained with Aceto-alum Carmine and was found to have unbranched intestinal caeca when examined under 40 X objective. We asked for stool samples. Formol ether concentration of the stool sample revealed plenty of ovoid, bile stained and operculated eggs (140µm X 80 µm) resembling ova of a fluke. Analysing the adult worm morphology and stool samples a conclusive diagnosis of Fasciolopsis buski was made.

Other Investigations

Blood Hematology and Biochemistry Reports :
Hb : 8.8 gm%.
Other results : Within normal limits.
Urine analysis : Unremarkable.
USG abdomen : Unremarkable.

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Patient received Praziquantel 600mg thrice a day for a single day only as it is the drug of choice for treating Fasciolopsis (Bobak, 2006). Thereafter 24 hours stool samples were examined for 3 consecutive days but neither of the samples were found to have adult flukes although fluke eggs were present. Her complaints gradually resolved. After 4 weeks we reexamined her stool but did not find any fluke ova.



Ova of *F. buski*



Adult worm of *F. buski*



Aceto alum stain of *Fasciolopsis buski*

DISCUSSION

Fasciolopsis buski, also called giant intestinal fluke is a duodenal digenetic trematode of the Fasciolidae family.

It was described for the first time by Busk in the duodenum of a sailor in 1843 in London and its life cycle in humans was first described by Barlow in 1925 (Paniker, 2013). Infections or infestations with Fasciolopsiasis seem to be restricted to areas where water vegetations such as water chestnut, water caltrops, water bamboo are abundant.

Aquatic snails act as intermediate hosts for the parasite. Two species of snails *Segmentina hemisphaerula* and *Segmentina trochoides*, have been particularly found to play an important role in disease transmission. Infective metacercaria encyst on aquatic plants after being released into water. The mature flukes develop and start laying eggs within 3-4 months after metacercaria have been ingested (Graczyk, 2001). Though pigs and humans both act as definitive hosts, pigs appear to be the only reservoir of infection (Manning, 1970). Clinically Fasciolopsiasis may present with occasional loose stools, loss of weight and abdominal pain. As the worm burden increases the intestinal obstructive symptoms increase as a result of increased mucus secretion and increased size of the worms. Patients may give history of passing greenish yellow, extremely malodorous stools and there may be associated oedema of face and limbs, generalized abdominal pain, ascites and even death. Adult worms at the site of attachment cause deep inflammatory ulcerations and their metabolites on absorption may also induce toxic reactions (Rabbani, 1985). This patient used to consume bulb of water chest nut by peeling the skin of the fruit in between the tooth. Moreover a pig farm is there in close proximity to the patients resident area. This personal and ecological history of the patient also supported our diagnosis.

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