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Ascaris Lumbricoides Causing Acute Abdominal Pain in Elderly Male.

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ABSTRACT

Ascaris lumbricoides is uncommon helminthic disease in older age group. It involves the whole abdomen of the body. They presents with (acute or chronic) abdominal pain, nausea, not passed stools. It involves gastro intestinal tract, results as acute appendicitis, acute peptic ulcer, acute cholecystitis, acute pancreatitis, acute pyelonephritis are found in most cases. We present a case of ascaris lumbricoides in older age group, so that earlier diagnosis can be made and prevent the most fatal parasitic infection.

Keywords: Ascaris. Lumbricoides, Helminthic parasite, Anti-Helminthic drug.

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INTRODUCTION

Ascariasis is common than other billion infection worldwide, with prevalence of 25% (0.8-1.22 billion people) [1]. Ascaris is habitually asymptomatic and one of the ubiquitous in children of tropical and also developing countries, uncommon in adults and also by contamination of soil by human feces and also by using untreated faeces as fertilizers [2]. Helminthic parasite which affects humans and ascaris is common than other billion infections world wide. They are common in rural (low socio economic status with poor sanitation) but, u common in urban population. Ascaris lumbricoides occurs in all age groups but, more common in preschool children and less common in adults. Ascaris. lumbricoides infection is mostly asymptomatic, later ends up in intestinal obstruction. We present a case of acute abdominal pain caused by ascaris lumbricoides.

Clinical Presentation

A 70 year old non-diabetic, non-hypertensive with an acute abdominal pain , nausea and giddiness – on and off, was admitted in emergency unit. Patient was awake, alert, afebrile, pallor+, mild dehydration noted.

On systemic examination:- RS- bilateral air entry, no added sounds. CVS- normal s1 and s2, no murmur. CNS- no neurological deficits.

On abdominal examination:- mild tenderness around umbilicus, peristaltic movements present, no organomegaly.

Day one stool sample send for routine stool examination – shows fertilized egg and few unfertilized eggs, no occult blood and all other routine stool findings were nil.

Ultrasound whole abdomen examination - normal study.

Patient was quite better after giving i.v. fluids (to correct dehydration), analgesics, anti helminthic drug as single dose for (deworming). Next day morning patient second sample send for stool examination for ova and cyst – very few eggs seen. During day time patient on sudden tense, patient coughed out 9ml of clear fluid with a huge adult worm was catched in a kidney tray [measures about (25-30) cms in length and (4 to 6) mm in diameter]. After vomitus, patient was kept for observation. Later patient was stable, advised for proper deworming in future and asked to bring third day stool samples for examination. Patient was discharged with stable vitals.





CONCLUSION

At the time of admission in emergency unit laboratory investigations were done. Haemoglobin level was 9gm/dl. Eosinophils -7 (increased).

On direct view of the Vomitus sample:- shows Adult female worm measures 25 to 30 cm in length and 4 to 6 mm in diameter and also adult female worm - posterior end is straight.

Stool routine for (ova / cyst) method:- (Lugol's iodine / normal saline).

- 1st sample:- shows very few ascaris lumbricoides fertilized egg, no unfertilized egg, and No occult blood seen.
- 2nd –sample:- shows very few unfertilized eggs in stool sample.
- 3rd-sample:-no ova and no cyst in stool sample.

Diagnosis is based on stool examination and Parasite presumptively identified by its alive worm in kidney tray. Diagnosed as ascaris lumbricoides and also from history- low socio economy status, poor sanitation in and around his area.

DISCUSSION

Ascariasis is a world-wide prevalent helminthic infection due to improper disposal of un hygienic human faeces is the main cause. Mode of infection:- Ascariasis.lumbricoides infection is by ingestion of embryonated eggs through (raw vegetables/ water / soil or water –contamination). The Fertilised eggs be hatched in the intestine \rightarrow released larvae enters deep into the intestinal wall, released larvae penetrate the intestinal wall and goes to right side of the heart \rightarrow next to pulmonary circulation \rightarrow to the alveoli. When larvae coughed upwards by the host, Larvae are swallowed back into the intestine to develop as adult worms.

The clinical features of Ascariasis lumbricoides are of mutable either symptomatic or asymptomatic and depends on parasitic load present in samples. In symptomatic mostly restricted to patients with high worm load. Ascaris lumbricoides common symptom are abdominal discomfort, anorexia, nausea, not passed stools. In case of children will have protein malnutrition and vitamin A- deficiency. Were as in adult worm which cause severe infection in nearby organs during migration, acute pancreatitis, acute cholecystitis, abscess in liver, atlast ends in intestinal perforation.

Mostly cause appendicitis and obstructive jaundice. Immense gastro intestinal bleeding with ulcer and also perforation, gangrene of the bowel wall are rare and ends up in death of the individual. Treatment wise maximum number of cases of un complicated ascaris lumbricoides infection mostly treated with Antihelminthic drugs – such as T.Albendazole, T.Mebendazole or T.Pyrantel pamoate, until worm is taken out from body. IN complicated cases ascariasis lumbricoides only by surgical management (laparotomy). In our case managed with anti helmintic drug for deworming process.

The early diagnosis is required to reduce the morbidity and mortality from complication of ascaris lumbricoides.

The public awareness regarding prevention of parasitic infection:- 1. Health education. 2. Improving sanitation. 3. Blocking transmission of infective form of the parasite.4. Identifying and treating infected individuals to prevent the spread of infection. 5. Administering available drugs and vaccine (if available). Ascaris lumbricoides causing infection (also other parasitic infections) and health education program as posters in (all languages) - helpful to the public to maintain their healthy life.

Treatment and outcome:-

Patient received the following:-

- 1. Tablet. Albendazole 400mg as a single dose for (deworming).
- 2. I.V.Fluids, anti-emetics, and analgesics.



Finally he fugitive from the most fatal parasitic infection by the degree of the treatment success depends on the infecting parasite, magnitude of the infection, the host's health and the infection site.

REFERENCES

- [1] Bethony J, Brooker S, Albonico M, Geiger SM, Loukas A, Diemert D, et al. *Lancet* 2006; 367(9521):1521-32.
- [2] Walker M, Hall A, BasÃjñez MG. PLoS Negl Trop Dis 2011; 5(4):e1047.

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