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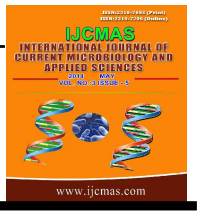

Case Report

Medical cause of obstructive jaundice in obstetric patient; an unusual presentation of ascariasis: A case report

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Keywords

Pregnancy, obstructive jaundice, ascariasis.

A B S T R A C T

Ascaris lumbricoides (A. lumbricoides) or round worm infestation is quite common in the developing world. It affects all age groups but is more common in children. Most of the cases remain asymptomatic. Here we present an interesting case of recurrent and fluctuating jaundice in a pregnant lady caused by A. lumbricoides. This case highlights the importance of searching for all treatable causes of jaundice in pregnancy. The physicians should be aware of this condition and consider it in the differential diagnosis when faced with such a case.

Introduction

Ascariasis is a common intestinal parasitic infestation in the endemic zones of tropics and subtropics. It is more prevalent and its course more serious in children than in adults (Das C.J. et al., 2007). Intestinal infection is generally asymptomatic. Besides intestinal symptoms, rarely patients may also present with hepatobiliary and pancreatic manifestations or incidental ascariasis at the time of abdominal surgery (Misra S.P. & Dwivedi M 2000).

Here this study discusses a case of recurrent and fluctuating jaundice in a pregnant lady from rural areas of Kolkata to highlight the importance of searching for all treatable causes of jaundice.

Case history

A 32-year-old obese G_3P_2 pregnant lady presented with history of aversion to food, recurrent fever, cough, abdominal cramps and whole body itching. She gave history of fluctuating jaundice for last 4 months. Previous pregnancies were uneventful. On general physical examination: anemia, icterus and pitting edema were observed. Systemic examination was unremarkable besides 7 months gestation. On the 3rd post-admission day, she passed black tarry stool. Laboratory investigations revealed a blood profile with haemoglobin 9.1gm%, eosinophil 18%, platelet 2,59,000/cu mm, reticulocyte 0.5%, and liver function profile of albumin 2.9 gm%, direct

bilirubin 3.8mg%, indirect 0.8mg%, uric acid 3mg%, alkaline phosphatase 356 IU/l (normal<167), alanine and aspartate transaminases 39 (N<37) and 58 IU/l(N<40). Prothrombin time was 13sec (control 12.5sec). Viral markers for HBV and HCV screening tests were negative. Renal function tests were normal. Occult blood stool was positive.

Abdominal sonography revealed intrahepatic and extrahepatic dilatation of bile ducts with normal hepatic echotexture. Upper gastrointestinal endoscopy was unremarkable. Barium meal follow-through showed "Tube-inside-tube" sign. [Fig.1.]. She was given antihelminthic along with parenteral iron and protein supplementation. She had expulsion of large number of round worms after antihelminthic. The worms were sent to microbiology laboratory and identified as Ascaris lumbricoides. She was discharged with sanitary advice. On follow-up her blood, stool, liver function test, coagulation profile, and abdominal ultrasound were normal.

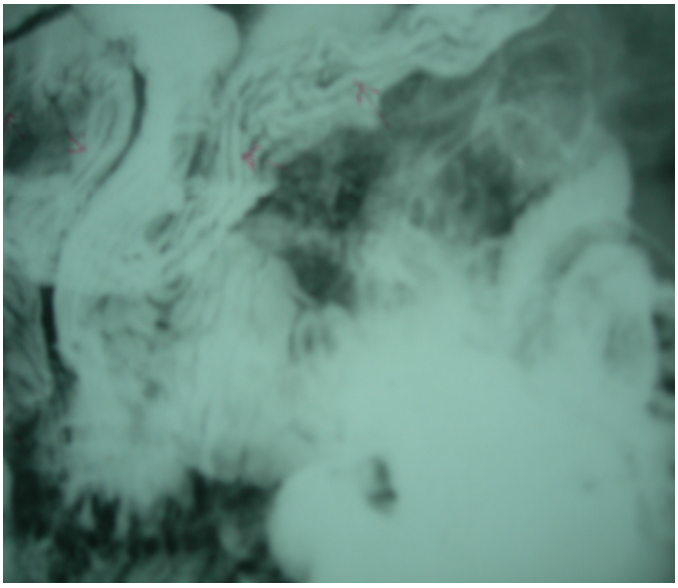

Fig. 1 "Tube-inside-tube" sign

Discussion

In the tropics, medical and surgical complications of ascariasis are seen more commonly in children as compared to adults.Ascariasis may occur, rarely in pregnant women who have special liking for soil. It may also occur in mentally challenged or institutionalized patients.
The adult worm wanders in the duodenum and enters the sphincter of Oddi and cause biliary obstruction and flees from the site as soon as it comes in contact with irritant bile and relieves the obstruction of bile flow causing fluctuating obstructive jaundice. It may cause several surgical complications such as ileal volvulus, perforations, intussusception, biliary ascariasis, and impacted multiple worm boluses in pediatric or geriatric patients (Raghu S. et al., 2012)

In pregnancy, it poses a great challenge to clinical diagnosis as laboratory tests and sonography remains unrewarding. Common causes of pregnancy related jaundice are intrahepatic cholestasis of pregnancy, HELLP (Hemolysis, Elevated Liver enzymes and Low Platelet) syndrome, AFLP (acute Fatty liver of pregnancy) and hyperemesis gravidarum. HELLP syndrome was ruled out as platelet count was sufficient. AFLP presents with hyperbilirubinemia, hypoglycemia, hyperuricemia and high creatinine which was not seen in this case. Hyperemesis gravidarum is diagnosed when morning sickness is present along with electrolyte imbalance. In the present case there was no history of morning sickness and electrolytes level was normal. Intrahepatic cholestasis of pregnancy was unlikely the diagnosis in this case as it develops in the third trimester of pregnancy & usually resolves rapidly after delivery.

Uysal G et al reported from Turkey biliary ascariasis in pediatric patient with biliary colic, cholangitis and septicemia. Obstructive jaundice was seen in 1.3% of cases (Uysal G et al., 2001).In our study also, the patient had septicemia, fever, cholangitis and biliary obstruction. In another large series of 500 patients with ascariasis, 56% had biliary colic, 24% had acute cholangitis, 13% had cholecystitis, 6% had acute pancreatitis, and 1% had hepatic abscess (Khuroo MS et al., 1990).
We did a barium meal follow-through examination to rule out any other intestinal cause of bleeding and picked up the diagnosis of intestinal ascariasis causing spoliative action as evidenced by anaemia and pedal oedema as well as jejunal ulceration causing melaena.She probably had recurrent attack of transient extrahepatic biliary obstruction and mild hepatitis as evidenced by elevated direct bilirubin and alkaline phosphatase with mildly raised transaminases.The abdominal ultrasound reporting corroborates to intra-and extra-hepatic biliary dilatation but no ascarids were seen.

Mebendazole and albendazole are safe ascaricidal used in 3rd trimester of pregnancy. Here, the patient was treated with mebendazole, achieving expulsion of worms and subsequent normalization of hepatobiliary functions.

Conclusion

This case highlights the importance of searching for all treatable causes of jaundice in pregnancy. Timely diagnosis and intervention prevented from doing unnecessary laparotomy. Secondly, in this era of transglobal trotting, Western physicians should be cautious of ascariasis especially in an immigrant Asian female from endemic zone with biliary symptoms.

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