

Case Report :

Pleural effusion in hepatitis A infection

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Abstract:

Hepatitis A is common infection in pediatric age group especially in developing country due to poor hygiene and sanitation practices. It is endemic in India. Here we report a case of hepatitis a with unusual presentation in 6 year old girl.

Key words: Hepatitis, pleural effusion,

Introduction:

Hepatitis a is most common cause of hepatitis in pediatric age group and endemic in India. Mostly it is a benign disease and clinical features are limited to liver though it may sometime present with extra hepatic manifestations and occasionally cause fulminant liver failure. In this report, we describe a case of acute HAV infection with unilateral pleural effusion with minimal ascites in a child, which spontaneously resolved with supportive treatment.

Case report:

A 6-year-old girl presented with fever for 1 week, vomiting for 5 days and passing high color urine from last 4 days. She was apparently well before 1 week then she suddenly developed fever of mild grade and mild headache. Headache subsided within next 48 hours on its own but fever continued. On 2nd day of illness she had started vomiting, mostly after feeding, non bilious, not associated with abdominal distension or constipation. She also complained vague pain in right upper abdomen. From next day, she observed high color urine and fatigue.

She was found to be icteric. There was no edema. On auscultation there was decreased air entry on right side of chest. There was tender Hepatomegaly. Rest of her examination was within normal limits. Based on symptomatology and clinical examination diagnosis of acute viral hepatitis was made and relevant investigations were sent.

The laboratory studies showed WBC 5450/ μ L, with 70% lymphocytes, hemoglobin 11.8 g/dL and platelets 399 000/ μ L. Urea, creatinine, electrolytes, glucose levels were normal. SGOT was 520 U/L, SGPT 674 U/L, ALP 334 IU/L, total bilirubin 6.8 mg/dL and conjugated bilirubin 5.4 mg/L. Total protein was 7 g/dL and albumin was 4.0 g/dL. Prothrombin time 13 seconds and activated partial prothrombin time 25 seconds. Anti-HAV IgM antibody found positive. HBsAg and HCV RNA came negative. Chest radiograph showed pleural effusion on right side; also confirmed as mild effusion by chest ultrasound. Child was given vitamin K and managed conservatively; and kept on follow up. Her urine colour gradually improved and serum bilirubin and hypertransaminasemia settled by 3 weeks. Pleural effusion on chest x-ray subsided by 5th day of illness.

Discussion:

Hepatitis A is usually a self-limiting disease, causing considerable morbidity and occasionally mortality. It presents with significant health issues in developing countries. Although hepatitis-A usually presents with mild symptoms or is

asymptomatic in children, extra hepatic manifestation is also not very uncommon, found upto 6.4-8% of cases. These include arthralgia, cutaneous vasculitis, cryoglobulinemia, hemophagocytic syndrome, acalculous cholecystitis, pancreatitis, aplastic anemia, Guillane-Barre syndrome, transverse myelitis, acute tubular necrosis, nephrotic syndrome, reactive arthritis and pleural effusion. Among these, pleural effusion is a very rare complication of hepatitis A. There are very few case reports available literature. Pleural effusion is self-limiting and resolves by itself, irrespective of duration of hepatitis. It doesn't hold any prognostic value. The exact pathogenesis of the effusion is unknown but it seems likely to be related with inflammation of the liver, immune complexes or secondary to ascites. It requires no additional treatment.

Conclusion:

Extra hepatic manifestations are not uncommon in hepatitis-A. Any child presenting with feature of hepatitis (Anicteric or icteric) with pleural effusion, Hepatitis A should be strongly suspected. Effusion in these cases is self limiting. Hence, unnecessary investigations are better avoided. Only good follow-up care is required. It is also emphasized that children be considered for vaccination against Hepatitis-A, particularly the ones from higher socio-economic status, as they do not contract natural infection early to acquire immunity. Acute viral hepatitis if occurs in later age like adulthood, manifests in severe forms, often with acute liver failure, a dreaded complication.

Competing interests:

The author declares that there is no conflict of interests regarding the publication of this paper.

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