Hepatitis A : An Unusual Presentation

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Introduction

Pleural effusion is a rare complication of acute viral hepatitis. The first case was reported in 1971 [1] and thereafter 15 additional cases have been reported. Among them, five were associated with hepatitis B [2] and three had hepatitis A infection [3]. The exact mechanism is unknown, though immune complexes have been cited as possible aetiological factor. Ascites is also a known complication of hepatitis A. A search of the literature revealed only two cases with both complications simultaneously [4,5].

Case Report

A five year old male child presented with three days history of nausea, vomiting and low grade fever. Clinically he had icterus and mild hepatomegaly with a 3 cms soft liver, below the sub costal margin. A clinical diagnosis of viral hepatitis was made. Investigations revealed a normal blood count and serum bilirubin of 5.2 mg/dl (direct 4.2 mg/dl). Alanine aminotransferase was 460 IU/L, serum proteins (total 6.5 g/dl, albumin 4 g/dl and globulin 2.5 g/dl) and prothrombin time (16/14 sec) was normal. Australia antigen (HBsAg) for viral hepatitis B was negative. Abdominal sonography revealed mild hepatomegaly with increased echogenicity and normal structure. Mild ascites with left sided pleural effusion was also noticed.

The diagnostic dilemma of an associated enteric fever or leptospirosis was ruled out by a negative widals test, blood culture and leptospira IgM test. Positive anti hepatitis A virus (HAV) IgM antibody titres confirmed the diagnosis of hepatitis A. Screening test for tuberculosis was negative. The child improved and recovered completely two weeks later.

Discussion

Clinical features of hepatitis A infection may go unnoticed. In contrast to adults, some children remain asymptomatic, whereas in others, onset is abrupt with symptoms such as nausea, vomiting, diarrhoea, fever, malaise, anorexia and abdominal distension. Most cases recover completely in two to three weeks and neither

chronic infection nor a carrier state occurs. Rarely, hepatitis A causes massive hepatic necrosis and fulminant hepatic failure, especially in older patients. The mortality rate in children is less than 0.1 %. Sometimes, atypical course includes cholestatic hepatitis characterised by jaundice and severe pruritis. Extra hepatic manifestation of hepatitis A due to deposition of immune complexes may manifest as arthralgia, arthritis and urticaria during the prodromal phase [6].

Pleural effusion and ascites in association with hepatitis A, though rare is a known association [7]. Usually these patients have an uneventful course. A small proportion of patients with hepatitis A experience relapsing hepatitis, weeks to months after apparent recovery from acute hepatitis [8]. Relapses are characterised by recurrence of symptoms, aminotransferase elevations, occasionally jaundice, and faecal excretion of HAV.

Conflicts of Interest

None identified

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