CASE REPORT ARTICLE

Acute Epstein Barr Infection Presenting with Hepatitis and Jaundice

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ABSTRACT

Background

Epstein Barr virus (EBV) infection usually presents with the well known constellation of symptoms of infectious mononucleosis.

Case Report Presentation

In this case report a young man presented with jaundice, mild abdominal pain and subjective fever as the only clinical manifestations of acute EBV infection. Further laboratory evaluation revealed that he was EBV-IgM positive. The work up for other types of acute hepatitis was negative. During his hospitalization he was treated conservatively and his liver transaminases bilirubin were monitored daily and demonstrated steady decline towards normal values. Liver biopsy was not performed since diagnosis was made by serology and careful physical examination. This report is followed by a short review of the literature on acute EBV hepatitis.

Keywords:

Epstein Barr, Hepatitis, Jaundice, Infectious Mononucleosis

INTRODUCTION

EBV infection presents clinically in adults with symptoms indicative of infectious mononucleosis (IM). Though EBV hepatitis is a common entity, clinically present jaundice with high bilirubin levels is less common.[1-4] We present a case of a young man with jaundice and bilirubin of 3.8 mg/dl, mild abdominal pain and subjective fever as the only clinical manifestations of acute EBV infection.

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CASE REPORT

A 19 year old male presented to our hospital with subjective fever and abdominal pain for one week. He had dark urine for 3-4 days prior to presentation. He had no joint pain, skin rash, sore throat or lymphadenopathy. He did not have any past medical or surgical history. The patient was not taking any medications, was sexually active with one female partner for the last one year and denied alcohol abuse, herbal or over the counter medications, blood transfusions, tattoos, piercings, intravenous drug use, needle stick injuries or recent travel to endemic countries. Upon arrival, his vital signs were within normal limits and he was afebrile. He had scleral icterus, had no pharyngeal erythema or tender lymphadenopathy, no hepatosplenomegaly and no abdominal tenderness. The basic metabolic panel was normal and the white blood cell count was 13.2 without left shift. Other laboratory tests revealed acute hepatitis with AST 653 IU/L, ALT 1134 IU/L, alkaline phosphatase (ALP) 340 IU/L, total bilirubin 3.8 mg/dl (direct bilirubin 2.7 mg/dl). Blood tests were negative for acute or chronic hepatitis A, B or C. Acetaminophen level was normal. Biliary obstruction, gallbladder pathology or presence of choledochal cysts were ruled out by ultrasound, HIDA scan and MRCP. During the hospital course the patient remained afebrile and asymptomatic. The second day of admission his WBC count was 10.2. Transaminases and bilirubin levels over the next six days decreased towards normal levels (table 1) and the patient was subsequently discharged home. Results of EBV serology (EBV anti-IgM) became positive after discharge. EBV IgG antibody, Human immunodeficiency virus, cytomegalovirus and herpes simplex virus serology were negative.

DISCUSSION

EBV is a member of the herpes virus family. When it infects children the disease is usually asymptomatic. In adults can manifest with the complex of symptoms of infectious mononucleosis, such as fever, malaise, lymphadenopathy, sore throat, hepatosplenomegaly and abdominal pain. EBV hepatitis usually presents with a two to three-fold elevation in transaminases, elevation of LDH, alkaline phosphatase and bilirubin levels.[5] These liver enzyme abnormalities most commonly present during the second week of infection and most of the times the levels normalize within two to six weeks.[5] In the minority of cases of EBV hepatitis, severe liver injury can be fatal.[6] Immunocompetent patients are usually