

Results: Overall 168 children (17.1%, 103 male and 65 female) out of total 982 patients of acute hepatitis were reactive for anti HAV IgM and none for anti HEV IgM. Fourteen adolescents (1.42%, 8 male and 6 female) between 13 and 18 years were infected with HAV, while 2 adolescent patients (0.2%) had HEV infection. Sixty-six adult patients (6.72%, 52 male and 14 female) had HAV infection while 12 adults (1.22%, 8 male and 4 female) were suffering from HEV infection. Amongst these, 6 patients (0.61%, 6/982) had HAV and HEV dual infection. Also 12 patients were HBsAg reactive and 8 patients had HCV infection among HAV or HEV infected patients.

Conclusions: 17.1% children of acute hepatitis were suffering acute viral hepatitis needing hospitalization. 1.42% of adolescents and 6.72% of adults were suffering from Hepatitis A virus infection acquired through feco-oral route. Prophylactic vaccination against HAV infection needs to be implemented in adolescents and adults from this region besides children.

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AETIOLOGY OF SPORADIC ACUTE VIRAL HEPATITIS IN NORTH-EAST INDIA – DIFFERENCES EXIST FROM THE REST OF INDIA

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Background: Acute viral hepatitis remains a major and mostly preventable cause of morbidity and mortality in India today. Aetiology of acute viral hepatitis cannot be differentiated clinically. Most reports on sporadic, epidemic, and fulminant cases of acute viral hepatitis from India implicate Hepatitis E as the major cause. Data from the North-eastern part of India is lacking.

Aims and objectives: To study the aetiology of sporadic acute viral hepatitis in northeast India and compare with the rest of India

Materials and Methods: The study population comprised of clinically suspected acute viral hepatitis, between 14 to 55 years, attending Assam Medical College Hospital in the period between September 2005 and December 2012. Patients with clinical and laboratory findings consistent with acute viral hepatitis were included after informed consent had been obtained. Chronic liver disease patients were excluded. Patients with metabolic disease or other infections including tuberculosis were also excluded from the study.

Serum samples were tested for markers of the major hepatotropic viruses at Assam Medical College. The results were re-validated in the PCR Hepatitis Laboratory in Maulana Azad Medical College, Delhi. All seronegative sera were tested for amplification of HBV DNA and HCV RNA by real time PCR.

Results: Five hundred and eighty-nine patients meeting all criteria were identified. The mean age of 29.4 years 68.8% were males. The commonest virus causing hepatitis was hepatitis A virus (33%) but non-ABCE hepatitis (34%) predominated. Only 20% were due to hepatitis E. Even in pregnant cases, hepatitis A was commonest while no hepatitis E was identified at all. Mortality was highest for hepatitis B (35.7%) and lowest for non-ABCE hepatitis (7%). There were 92 cases of fulminant hepatitis, again in which the percentage of hepatitis A (28.3%) was significantly higher than that of hepatitis E (20.6%).

Conclusions: In North east India, hepatitis A was the commonest cause of viral hepatitis. Hepatitis B was the leading cause of mortality. Hepatitis A was most closely associated with fulminant hepatitis and pregnancy. These findings are in gross contrast with literature from the rest of the country.

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DISTRIBUTION PATTERN OF HCV GENOTYPES & ITS ASSOCIATION WITH VIRAL LOAD IN CHURACHANDPUR DISTRICT OF MANIPUR, INDIA

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Background and Aims: Hepatitis C virus (HCV) has emerged as a leading cause of chronic hepatitis, liver cirrhosis and hepatocellular carcinoma worldwide. There is no standard protocol of treatment care available in this region. For planning of therapeutic regime genotyping and assessment of the viral load in HCV patients is important. Thus the present study was carried out in the off site study centre of Texila American University Guyana at Churachandpur district of Manipur India to determine the distribution pattern of HCV genotypes in chronic hepatitis patients and their association with biochemical parameters and viral load

Methods: Fifty HCV RNA positive patients were included in the study. HCV genotyping was carried out at Lal Path Lab, by restriction fragment length polymorphism (RFLP) followed by the direct sequencing of the core region. Viral load estimation was carried out by Taqman real time PCR system.

Results: Eighty percent (40/80) of cases were infected with genotype 1 followed by genotype 2 in 14 per cent (7/50) and genotype 3 in 6 per cent (3/50) of cases. Genotype 1 was associated with a significantly ($P < 0.001$) higher viral load as compared to genotypes 3 and 2. No significant difference was seen in the biochemical profile between the three groups of genotypes. Parenteral transmission accounted for 60 percent of all the infected cases.

Conclusions: The present study revealed that HCV genotype 1 accounted for 80 per cent of the HCV infection in Churachandpur District of Manipur. Genotype 1 was associated with more severity of liver disease as compared to genotypes 3 and 2 as assessed by viral load.

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A CASE OF CHRONIC CYTOMEGALOVIRUS HEPATITIS IN IMMUNE-COMPETENT

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Background: Cytomegalovirus (CMV) infection is usually sub clinical in immune-competent. The most common clinical manifestation of CMV infection is mononucleosis syndrome. The elevated serum aminotransferase and alkaline phosphatase without significant jaundice may be seen. However the review of literature revealed very few case reports of chronic CMV hepatitis in immune-competent individuals.

Case Report: We hereby report a case of 19 year old lady married with one child who presented with complaints of jaundice with fever on and off since 6 months. She had taken native medications for the same. The initial work up revealed bilirubin levels between 2–4 mg and slightly elevated liver enzymes. The IgM HepA and E, HBsAg, Anti HCV and HIV were negative. Her workup for Wilsons and autoimmune liver disease was also non-yielding. The Ultrasonography study of abdomen and upper GI endoscopy studies were normal. The liver biopsy revealed changes consistent with diagnosis of chronic viral hepatitis probably CMV. The IgM and IgG for CMV were also positive. She was planned up for antiviral therapy in view of persistent viremia. But the viral DNA level at the end of three months was negative. During her regular follow up no other evidence of immune incompetence was noted.

Conclusion: CMV hepatitis usually encountered with post transplant patients and immune compromised patients

should be thought of in cases of jaundice with fever, relative lymphocytosis and negative viral markers. The infection is usually self resolving however severe hepatitis has been reported and the above case is an example of chronic CMV hepatitis in immune competent individuals.

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SPECTRUM OF POLYMORPHISMS OF IL28B IN CHRONIC HEPATITIS-C PATIENT AT A TERTIARY CENTRE AT PATNA

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Introduction: Hepatitis C virus (HCV) infection is a global health problem which can lead to liver cirrhosis or hepatocellular carcinoma in one-fifth of chronically infected patients. Polymorphism of IL28B is considered a predictor of outcome in anti viral therapy.

Materials and Methods: The study group consisted of 18 HCV infection, who were treated with pegylated interferon alfa (Peg-IFN- α) and ribavirin in last one year at a tertiary centre at Patna. We analyzed single nucleotide polymorphisms (SNPs) of IL28B in all patients.

Results: Four patients out of 18 had CC genotype of rs12979860 and rest 14 patient had TT genotype of rs8099917 in this cohort.

Conclusions: The analysis demonstrated that in patients with HCV infection the TT variant occurred more frequently whereas CC was found less frequently in our population.

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INCIDENCE OF HBV INFECTION IN PREGNANT FEMALE AT A TERTIARY CENTER AT PATNA

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Objective: Hepatitis B virus (HBV) infection is very common in our population. It is usually detected during screening programme in asymptomatic subjects. Pregnancy is a time for screening for HBV.