

Prevalence of Hepatitis A Virus (HAV) and Hepatitis E Virus (HEV) in the Patients Presenting with Acute Viral Hepatitis (AVH) in a Tertiary Care Hospital

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Prevalence of Hepatitis A Virus (HAV) and Hepatitis E Virus (HEV) in the Patients Presenting with Acute Viral Hepatitis (AVH) in a Tertiary Care Hospital

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Abstract

Background: AVH is a major public health problem in developing countries. Hepatitis A virus (HAV) and Hepatitis E virus (HEV) are both transmitted through faecal-oral route, causing acute viral hepatitis (AVH).

Aims and Objectives: The purpose of this study was to know the prevalence of HAV and HEV in the patients with AVH and their co-infection.

Materials and Methods: This prospective study was conducted during January 2015 to December 2015 in ICMR, department of Microbiology, RIMS, Ranchi. Samples of 409 patients presenting with AVH were considered in the study. On the basis of history, serum samples were analysed for IgM antiHAV and IgM anti-HEV for the detection of HAV and HEV, respectively using commercially available ELISA kits. Data was collected in excel sheets and analysed by SPSS software.

Results: The prevalence of HAV and HEV among AVH patients of all age groups was 11.49% and 11.73% respectively and co-infection with both HAV and HEV was found in 0.48% only. The prevalence of HAV was predominant in children (40%) whereas prevalence of HEV was more among adults (14.33%). Both HAV and HEV cases were seen throughout the year with peaks of HAV cases in the months of May, July and August and peaks of HEV cases in the month from January to May.

Conclusion: The prevalence of HEV is more in adults whereas prevalence of HAV is more in children. Presence of coinfection with both HAV and HEV in AVH patients necessitates the screening for HEV along with HAV in all AVH patients. The data of the present study may be useful for planning of better sanitation programme and for other preventive strategies in this region of our country. Key words: Acute Viral Hepatitis, Hepatitis A Virus, Hepatitis E Virus, Prevalence. *Correspondence to: Dr. Ashok Kumar Sharma, Associate Professor, Department of Microbiology, Rajendra Institute of Medical Sciences, Ranchi, Jharkhand. Article History: Received: 14-12-2016, Revised: 03-01-2017, Accepted: 26-01-2017

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