INTRODUCTION
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Acute viral hepatitis is a major health hazard in both developed and developing countries. The six hepatotropic viruses A,B,C,D,E and G have been causing considerable morbidity and mortality especially in developing countries. As it is a well documented fact that HAV and HEV are feco-oral spread and ours being an over populous, poverty stricken country, with most of the people not having proper sanitation. These viruses have been causing myriad, voluminous cases of hepatitis that are mostly subclinical and recover, and may never even come to the clinician. But there is a sizeable proportion of those in whom the various complications of acute viral hepatitis i.e., hepatic encephalopathy, ascites, spontaneous bacterial peritonitis, hemorrhagic manifestations, chronic hepatitis, fulminant hepatic failure, hepatocellular carcinoma occur. These are the children who are in dire need of hospitalization.

On account of the high cost and unavailability of commercial kits routinely, there is dearth of literature, with regards to acute viral hepatitis in Bundelkhand. The main queries that we have tried to solve in our study are – The age related distribution of children afflicted with acute viral hepatitis along with its complications, the pattern of the biochemical parameters, which is serum bilirubin, SGPT, PT, and their
statistical significance and lastly testing the sera of these children by commercially available kits for the four hepatitides A, B, C, and E.

The exact incidence of Hep. A is not known on account of a high proportion of asymptomatic cases. Hep. B is a global health problem with > 2 million affected world wide and 350 million carriers. In India 6% of the population is affected. Hep. C virus is infecting 3% of the world at present. In India exact incidence is unknown because of asymptomatic cases. 2 - 5% of the blood donors are positive for HCV in India. In India > 50% acute viral H is caused by non A / non B/ non C enterically transmitted virus which is HEV. It occurs in all epidemic, endemic, sporadic forms in India. It has a very high mortality rate because of fulminant liver failure in pregnant females in South East Asian Region (20%).

Hep. A, E are spread by faecal contamination of water while Hep. B is spread by bld. / bld. products and contact with body fluids / sexual contact. HCV is similarly transmitted parenterally. HGV is limitedly similar to HCV.

HBV is DNA virus while HCV, HAV, HEV & HGV are RNA viruses. For the purpose of diag. Of these viruses serological tests have been the main stay to this day on account of being able to confirm / document even asymptomatic cases.
HAV / HEV is best diagnosed by IgM antibody (detected by ELISA) presence that appears within 1-2 wks. and persists for 3-4 m. ELISA has the highest sensitivity (99.9%) and specificity (99.9%) so this test will be one of the tools of the study.

HBV has three kinds of antigens HBsAg, HBcAg and HBeAg. HBeAg denotes infectivity of the infected person while HBcAg doesn’t appear in bld. and remain in the liver. HBsAg is the first serological marker to appear in the serum after 1-2 wks. and disappears in 1-2 m following onset of jaundice. Anti HBcAg IgM is a marker of acute infection apart from HBsAg and comes after 1-2 wks. of HBsAg appearance.

Though there is no dearth of literature on acute viral hepatitis and its complications in the Pediatric population in the rest of the country. Yet, Bundelkhand stands apart in this aspect.

On account of the cost effectiveness and early and protracted course of HBsAg this will be employed as the marker of choice for HBV detected by LATEX. Agglutination method (sensitivity 99% specificity 99%) though ELISA (sens. 100% sp. 99.9%) is superior.

HCV detection is based on anti-HCV antibodies that appear after 3-11 wks. of infection. Persistence is variable. Two types of tests are available ELISA and RIBA (Recombinant Immunoblot Assay). RIBA
has a sen. /sp. 100% and is superior to ELISA therefore this will be the fourth tool of the study.

Our main aim was to segregate and study children suffering from acute viral hepatitis who were hospitalized on account of its various complications, on the basis of history, clinical findings and liver function tests (S. Bilirubin, SGPT & PT) and who have been coming to the medical college in sizeable chunks year after year signifying the high morbidity and mortality on account of acute viral hepatitis and its complications in this region.

The main queries that we have tried to solve in our study were the age related distribution of children afflicted with acute viral hepatitis along with its complications, the pattern of the biochemical parameters which is serum bilirubin, SGPT, PT and their statistical significance and lastly testing the sera of these children by commercially available kits for the four hepatitides A, B, C & E.