

# SPECTRUM OF VIRAL HEPATITIS

Pages with reference to book, From 288 To 288

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The frequency of different types of hepatitis varies in various countries<sup>1,2</sup> and from one part of the country to the other. To evolve a strategy for the control of hepatitis variations in the pattern of disease should be known. Observed frequency of different types of hepatitis and the comparison with other series<sup>3,4</sup> is presented in this report.

## PATIENTS, METHODS AND RESULTS

One hundred and sixty three cases of sporadic acute viral hepatitis were included in this study. Clinical diagnosis in all cases was supported by laboratory evidence of hepatocellular necrosis (AST/ALT levels 2.5 times the upper limit of normal). Sera collected in acute phase and stored at -20°C were analysed for various seromarkers of hepatitis using radioimmunoassay technique (Abbott Laboratories, Chicago, Illinois). Hepatitis A was serologically diagnosed by the presence of 1gM antibody to hepatitis A virus (1gM anti HAV) and hepatitis B, if hepatitis B surface antigen (HBsAg) and 1gM antibody to hepatitis B core antigen (anti HBc1gM) were positive. If all markers were negative the disease was diagnosed as NANB hepatitis. Chi square and student's 't' tests were used for statistical analysis. Frequency of various types of hepatitis in the present study is compared with reported series from northern Pakistan<sup>3,4</sup> (Table).

**TABLE. Pattern of Hepatitis in Pakistan.**

	Present Series (163)		Malik et al <sup>3,4</sup> (323)	
	Children	Adults	Children	Adults
A	17	2	54	-
B	4	61**(45%)	6	53 (23%)
NANB	7	72 (53%)	27	179** (77%)
A+B	-	-	4	-
Total	28	135	91	232

\*\* P<0.001

There was no difference in the pattern of hepatitis in children but in adults, significant differences were observed. Hepatitis B was more frequent in Karachi and NANB in northern Pakistan.

## COMMENTS

Early exposures to hepatitis A virus in Pakistan causes disease in children under 5 years. Ninety six to 100% of adults are immune to hepatitis A<sup>5,6</sup>. Pattern of hepatitis A is similar in children and adults

throughout the country. Significant differences were however, observed in hepatitis B and NANB in northern Pakistan<sup>3,4</sup> and Karachi. Lack of reliability and accessibility of drinking water, pattern of drainage and sewage disposal personal, domestic and food hygiene is similar throughout the country so the differences observed may be due to the difference in patients selected for the study, i.e., army personnel and their families in northern Pakistan and referred cases to a speciality unit in a general hospital. Living conditions of army personnel and injection and transfusion practices in army hospitals may be better than those of small clinics and general hospitals in Karachi. Seroepidemiological studies on a large population based samples of hepatitis cases from various areas of the country should be done to define the pattern and determine the causes of difference if any in various areas.

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