

PREVALENCE OF HBsAg IN ADULTS NEEDING ENDOSCOPY AND ITS LIKELY AETIOLOGICAL FACTORS

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A total of 1200 patients needing endoscopy for upper and lower Gastrointestinal symptoms were screened for HBsAg at the DHQ Teaching Hospital of Ayub Medical College Abbottabad, using the Hepatitis-B Quick Test of the 1200 patients 553 were females and 647 males. Amongst these 40(3.33%) were HBsAg positive, of which 16 were male and 24 females. 33(82%) patients gave a history of parenteral injection; 24(60%) of I/V infusion and 5(12.2%) had no history of injections /infusion or transfusion. The above figures suggest that HBsAg is not as common in Hazara as compared to studies done in bigger towns of Pakistan secondly parenteral therapy seems to be the most important mode of transmission. In order to further reduce the incidence, we need to educate the people the paramedical staff and laboratories dealing blood transfusions.

INTRODUCTION

Hepatitis-B virus was first isolated in Australia by Blumberg in 1965¹ and was called The Australian Antigen. This was later associated with Hepatitis- B and therefore called Hepatitis-B Virus.² The clinical manifestation of HBV infection is very variable. The infection can be asymptomatic (carrier state), present as acute hepatitis, acute fulminant hepatitis chronic hepatitis, cirrhosis and hepato cellular carcinoma. It is these asymptomatic patients who are most harmful to others as they un-intentionally pass on the infection to others and therefore need to be detected so that necessary precautions can be taken. In Pakistan 22.8% patients with acute hepatitis are HBsAg positive². HBV is known to affect approximately 5% of the population worldwide. Pakistan has a moderately high prevalence rate but tends to vary in different parts of the country, being higher in industrial areas and large cities. In Islamabad in blood donors it was found to be 8%,³ in Rawalpindi 10%⁴ its carrier state also varies in different parts of the world as shown in table 1.

Table -1: Prevalence of HBV Infection.

Country	HBV Carrier Rate %
UK	0.1%
Eastern Saudi Arabia	8.8%
South East Asia	20.0%
U.S.A.	0.2%
Pakistan	10.0%

MATERIALS AND METHODS

Fresh blood samples from 1200 patients needing upper or lower gastrointestinal endoscopy at the

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DHQ Teaching Hospital of Ayub Medical College, Abbottabad, were taken and screened for HBsAg, of the 1200 patients 553 were females and 647 males. A history was obtained regarding jaundice, blood transfusion, I/V fluid infusion and parenteral injections. HBsAg was tested by Hepatitis-B quick test.⁸ This is a 3rd generation test according to specification of the FDA (Food and Drug Administration U.S.A). Positive and negative controls were run with each series.

RESULTS

Out of the 1200 patients, 40 (3.33%) were HBsAg positive of which 16 males and 24 females. 33 (82%) patients gave a history of parenteral injections, 24 (60%) of I/V infusions and 5 (12.2%) gave no history of infusions, injections or blood transfusion or a history of Jaundice as shown in table-2.

Table-2: Prevalence of HBsAg in Patients Needing Endoscopy in Hazara Division.

Sex	No.	HBs Ag + ive No. %	
Male	553	16	2.8
Female	647	24	3.7
Total	1200	40	3.33

DISCUSSION

HB infection may take a varying clinical course most patients may have the infection transiently and may go on to recover fully. However, 5-10% cases progress to chronic liver disease. Serological studies in different population reflect the epidemiology. The disease is most common in the lower socio-economic groups. The average carrier rate of HBsAg in Pakistan adults is about 10%². The high HBsAg carrier rate is due to factors like use of unsterilized glass syringes, reuse of disposable syringes, lack of mandatory testing for HBsAg during blood transfusion, use of unsterilized instruments by roadside barbers unqualified dentists, nose pierces and tatoers.

In our study the carrier rate was 3.33% which is much lower than that of other studies which have mainly been conducted in larger town and

industrial area. The reason could be the inaccessibility of this population, which to a great extent is rural, to injectable for therapy, even then most of our patients who were HBsAg positive, i.e., 82% gave a history of parenteral injection, only 12.2% had no history of injection/blood transfusion, which suggests that parenteral therapy tends to play a major role in the transmission of infection and should be discouraged if not essential and it at all required properly instituted. People at high risk of infection should be vaccinated like Health staff, sanitary workers, homosexuals, prostitutes etc. In order to protect them and also prevent the spread the disease through them.

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