

# Study of Hepatitis "B" Antigenaemia in Govt. Hospital for Psychiatric Diseases

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The study was carried out to see the incidence of HBsAg in different psychiatric patients in Govt. Hospital for psychiatric diseases. Design of study: It is a clinical study. Patients and Methods: 1000 patients were included in this study, coming in and out patients departments of this institute. All the patients showing abnormality in their enzymes were tested for serological assessment of HBs Ag by serodia technique. Our result showed 26% (260/1000) prevalence of Hepatitis "B" virus in all patients showing abnormality in their enzymes. There was no significant difference in both sexes. There is much high rate of prevalence in psychiatric patients the high prevalence compels us to launch major public awareness program & immediate attention towards its spread.

**Key words:** HbsAg, prevalence, serodia method, enzymes, hepatitis

Hepatitis "B" virus is one of the major health problems world wide but more so in the developing countries<sup>1,2</sup>. It can produce both acute and chronic hepatitis, as well as chronic carrier and can result in cirrhosis or primary hepatocellular carcinoma and there was no higher difference in the prevalence of HCC in general population of Pakistan<sup>3,4</sup>.

Many studies on hepatitis B prevalence have been performed in the world. In one study in Gambia, West Africa. The prevalence of HBV DNA was 74% (74/99) in young carriers, 30% (35/115) in older children carrier's and 12.6% (9/71) in adult carriers, which indicate a significant decline with age<sup>5</sup>.

Considerable evidence suggests that immune mechanisms are involved in pathogenesis of both HBV and HCV infections may be responsible for Hepatocyte damage in hepatitis B & C<sup>6</sup>. Pakistan is endemic for hepatitis B this virus may lead to acute chronic or carrier's infection<sup>7</sup>. HBV carriers are classified on the basis of seromarkers namely HBs Ag, Hbe Ag and anti Hbe. The Anti Hbe positive show high infectivity and called "ordinary carriers" those negative for both HbeAb and anti Hbe are placed in "intermediate group" and are in sero conversion phase<sup>8</sup>. In Pakistan HbsAg carriers are 3-4 % while prevalence of HBs Ag in Hepatitis patients is 30% while in general population its rate is 31.5%<sup>9</sup>.

The objective of this study is to see prevalence of HBV antigenemia in psychiatric patients

## Patients and Methods

One thousand patients with mild to severe changes in their liver functions in govt. Hospital For Psychiatric Diseases Lahore were selected from 1998-2000. Out of which 250 were female and 750 were males Five milliliters of blood was taken from the patients and sera was analyzed for the detection of HbsAg by reverse positive hemagglutination test<sup>10</sup>. This serodia technique is commonly used in our country. It can be strongly recommended as its sensitivity

is more than 80%. Kits used were of hepatitis B QUICKSET of Biocon from Germany<sup>10</sup>.

## Inclusion Criteria

1. Patients of age 18-50 years from both sexes selected randomly.
2. Psychiatric patients showing abnormalities in their LFTs.
3. Patients with H/O previous Jaundice or any other liver disease.
4. Patients coming indoor or out door of this institution.

## Exclusion criteria

1. Children and old patients were not included in this patients
2. Patients not showing any abnormalities in their LFTs

## Results

About 1000 total tests were performed, from both sexes during 2 year of study from 1998 to Aug 2000. The serodia technique revealed 260 total positive cases, therefore the prevalence of HbsAg is 26% in patients with viral hepatitis showing changes in their liver enzymes out of 750 male 200 patients were reactive (26.6%) while out of 250 females 60 patients gave positive results 24% (Table 1).

Table 1 Detection of HBsAG by serodia method (n=1000)

Positive cases			Negative patients	%age
Male	Female	Total		
200(26.6%)	60(24%)	260	740	26%

## Discussion

Blumberg et al discovery of HbsAg, represented a significant breakthrough in the understanding of hepatitis "B" infection. Screening methods has significantly reduced the incidence of HBV in blood transfusion recipients<sup>11,12,13</sup>. Our results are consistent with the study of others like Bukhari et al 1999, the prevalence at Mayo Hospital was

found to be 25%<sup>10</sup>. In our study there was no significant difference in the prevalence of HbsAg (Table 1).

There is about 350 million HbsAg carrier worldwide, of which 75% reside in Asia<sup>14,15</sup>.

In Northern areas of Pakistan the prevalence is much high (37%)<sup>16</sup>, where as primary hepatocellular carcinoma with high prevalence of HbsAg in Southern Punjab is 61% and 21% in another study carried out in Sheikh Zaid Hospital<sup>17,18</sup>. Cirrhosis is associated in 24% of patients<sup>19,20</sup>.

The high prevalence in Lahore compels us to launch major public awareness program for vaccination and the methods of its transmission like contamination with infected blood, reuse of disposable syringes, sharing needles with drug addicts, sharing razors, tooth brushes & nail cutters, ear piercing, manicures, acupunctures, tattooing & close contact with infected persons.

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