

Hepatitis B Frequency (Seropositivity) in the Patients of Chronic Liver Disease in Balochistan

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ABSTRACT

Aims: To document the prevalence of Hepatitis B Seropositivity in patients with Chronic Liver Disease from all parts and every walk of life in Balochistan and to provide a base for further studies on a large scale of a large sample size.

Methods this was single centre randomized trial having no control group. Serum samples were collected in The "National Program For Hepatitis and Gastroenterology and Surgery Departments of Bolan Medical Complex Hospital Quetta during the period from April 2008 to January 2009. HBsAg was detected by Elisa Third Generation from Agha Khan University Hospital Karachi, and Shoukat Khanum Hospital Lahore. A Total 1054 Patients were included in this study who belonged to every walk of life in Balochistan in which 554(52.56%) were males and 500(47.43%) were females.

Results: Out of 1054 patients of the chronic liver disease, total of 255 (24.19%) tested positive for HBsAg including 150 males (27.07%) and 105 (21%) were females in the patients of chronic liver disease. The sero prevalence of HBsAg in the patients of chronic liver disease in male and female patients is the same as published in the national and international literature. The Majority of the patients had no idea about the vaccination, causative factors, preventing measures, treatment and complications, Which Indicates a very pathetic situation of hepatitis patients in Balochistan.

Conclusion: The seroprevalence of HBsAg in the patients of chronic liver disease is some what high among the male patients approached our centre for the proper workup of Chronic Liver disease which is not statistically significant. And is quite comparable to the frequency of HBsAg in patients of chronic liver disease in different parts of the country and as well as in the international world. .

Key words: Hepatitis B. Frequency of. Hepatitis B. Chronic Liver Disease.

INTRODUCTION

Chronic Hepatitis B is a major Global health problem affecting more than 400 million people world wide¹. The Asian regions remains an area of high endemicity , although Pakistan falls in intermediate endemicity area². Cirrhosis and Liver Failure of Hepatocellular Carcinoma (HCC) develops in 15-40% patients infected with Hepatitis B Virus (HBV)³.

The limitation of HBsAg is that it may detect active infection, whether recent or chronic .it gives no information about those who acquired infection in the past, got cleared naturally which is the usual result of 90% of infection in the adults⁴. Between 5% and 10% of the HBV infected adults develop Chronic Hepatitis B, eventually develop Cirrhosis or HCC⁵.

The situation in Pakistan is generally and in Balochistan particularly is very grave and serious. In Pakistan various researchers have worked on the prevalence of HBsAg, Seropositivity among various communities, but no authentic study has been done in Balochistan on vast number of patients of Chronic Liver Disease.

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PATIENTS AND METHODS

This was a single centre randomized trial having no control group. This study was conducted in the National Program For Prevention and Control OF Hepatitis and The Department of Gastroenterology Bolan Medical Complex Hospital Quetta, during the period from April 2008 – January 2009 .The HBsAg was detected by Elisa Third generation from Agha Khan University Hospital Karachi and Soukat Khanum Hospital Lahore. A total of 1054 with the age range of 14-64 years. Patients belonging to every region and every walk of life in Balochistan were included in this study, But the Majority were belonging to a very poor socioeconomic class and lower middle class. This is why because the treatment was free of cost in National Program for Hepatitis and the investigations were funded by the Zakat Fund .The ratio of male and female patients was the same as published in the national and international literature.

RESULTS

Total of 1054 number of chronic liver disease patients with an age range of 14-64years were included in this study .In which 554(52.56%) were Males and 500(47.43%) were Females .The ratio of

male and female patients of the chronic liver disease participated in this randomized trial, was the same. In this study 255 (24.19%) were positive for HBsAg and 799(75.81%) were negative for HBsAg. Total male patients positive for HBsAg were 150(27.07%) and 105(21%) females were positive for HBsAg. There is no statistically significant difference gender (Table 1).

Table 1 HBsAg Seroprevalence in Balochistan.

No. of pts.	HBsAg +ve	HBsAg -ve
Total 1054	255(24.19%)	799(75.81%)
Males 554(52.56%)	150(27.05%)	404(72.95%)
Females 500(47.43%)	105(21%)	395(79%)

Table 2 HBsAg Seropositivity By gender (n=255)

Gender	Number	Percentage
Males	150	58.82
Females	105	41.81

The majority of the patients had no idea about vaccination, causative factors, investigations, treatment, complications, and preventing measures, especially females are ignored for investigations and treatment by their male gender in a male dominant society of Balochistan which shows a very pathetic situation of the patients of hepatitis in Balochistan.

DISCUSSION

In Pakistan 7million people with reporting rate of 5% are suffering from Hepatitis B. There are about 31% cases of Acute Hepatitis and 6% cases of Chronic Hepatitis. 59% of Hepatocellular carcinoma are due to Hepatitis B⁶.

Studies carried out on different segment of population have shown various degrees of prevalence in different risks groups⁷. The prevalence of HBsAg in young healthy Pakistani adults shown in studies carried out in a cross section of the population has ranged from 2.56% to 3.53%.⁸ the study carried out in southern Punjab shows that the Frequency of HBsAg in young adults is 5.9%.⁹ The study done in Hazara Division where 30.35% of patients were positive for HBsAg and 69.65% were negative for HBsAg. Our study shows the prevalence of HBsAg in 30.35% of the Chronic Liver Disease patients and 75.81% are negative for HBsAg, which is slightly lower than the studies done in other parts of the country. But this is not statistically significant. The male to female ratio is a bit higher. This is may be the fact that the male has slightly easy approach to the health facility in a male dominant society of Balochistan. The other risk factors are poverty, ignorance, lack of awareness about the actual nature and preventive measures of Hepatitis. Non availability of Blood Screening

Facilities, I.V Drug Abuse, Needle prick, Ear piercing, Acupuncture, Tattoos, Barber Razor. Sharing of Tooth Brushes, Fomites and abrasions and lacerated wounds. The following measures should be taken to counter this hazardous infection.

1. The Facilities for the proper screening of blood and blood products should be provided in the Government and private sector hospitals.
2. Medical Doctors, other Medical staff and Media should educate the people about this infection, its complications and Risk Factors.
3. Facilities for proper workup of the patients should be provided by the Government in every District Level Hospitals and Rural Health Centers.
4. The Facilities for mass vaccination should be provided by the Government in every Hospital.
5. Advanced facilities for proper sterilization of instruments used in Surgery and Dentistry in every hospital of any level should be provided by the Government.
6. Proper disposal of hospital wastes should be made sure in every hospital.
7. Media campaign should be launched about the use of Disposable Syringes, Shaving Kits and other instruments.
8. Country wide Seminars and Symposia should be arranged by the Government, to educate the people about this dangerous infection.

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