SHORT COMMUNICATION

FREQUENCY OF HEPATITIS B SURFACE ANTIGEN AND ANTI-HCV IN YOUNG ADULTS - EXPERIENCE IN SOUTHERN PUNJAB

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Hepatitis B and C are the major diseases of mankind posing serious global public health problem. Of the two billion persons who have been infected with hepatitis B virus (HBV) worldwide, more than 350 million have chronic life long infections. Hepatitis C virus (HCV) infection appears to be endemic in many parts of the world with prevalence of around 3%.1 In Pakistan, studies carried out on different segments of population have shown variable degree of prevalence in different risk groups. According to an estimate, there are about 9 million hepatitis B and over 14 million hepatitis C carriers all over the country.2

The prevalence of hepatitis B surface antigen (HBsAg) and antibodies to hepatitis C virus (anti-HCV) in young healthy Pakistani adults in recent studies carried out in cross section of population has ranged from 2.56 - 3.53% and 2.3 - 5.3% respectively.3-5 The purpose of this communication is to describe the frequency of HBsAg and Anti-HCV in a cross section of a young healthy population of Southern Punjab. Such information may be invaluable while making geographical comparisons regarding the overall seroprevalence of the two diseases.

A total of 1821 young male individuals, presenting at the Pathology Department of Combined Military Hospital, Bahawalpur, from January to December 2005, for their medical evaluation as a pre-requisite for recruitment in the Armed Forces, were tested. The details regarding age, marital status, residential area, history of minor/major surgical operation, dental procedures, skin tattooing, history of jaundice, blood transfusions, therapeutic injections, regular visits to barbers for shave etc. were taken. All the individuals were asymptomatic. The age range was between 17 - 23 years. The individuals were drawn from 12 districts of Southern Punjab. The minimum education standard was 10th grade. The anti-HCV antibody and HBsAg were performed with IDI-IND Diagnostic Inc. (Canada) one-step quick immunoassay technique. All the positive samples were also analysed by third generation ELISA. None of the individuals refused testing. Only 9 individuals were vaccinated in the past for Hepatitis B and they were not included in the study.

Of the 1821 samples tested during the mentioned period, 108 (5.9%) samples were finally declared positive for hepatitis B surface antigen and 46 (2.5%) positive for anti-HCV. Double infection with HBV and HCV was found in 17 (0.93%) samples. These results revealed that the frequency of hepatitis B surface antigen (5.9%) in young adults belonging to Southern Punjab was higher than some of the other recently done studies in Pakistan.3-5 The maximum cases with positive HBsAg and anti-HCV were noted in individuals belonging to Muzaffargarh (10.5%) and Bahawalpur district (4.02%), respectively. The detailed frequency of different districts is shown in Table I. Comparing these findings with the recent studies carried out on similar type of population in Pakistan, it was found that population group belonging to Karachi, Southern Punjab and Central Punjab had frequency of anti-HCV in the range of 2.2 - 3.3%, whereas in the north, it was 5.3%.3-5 It was also salient to note in the study carried out by Farooq et al,3 whereas the overall prevalence rate of anti-HCV was 3.3%, the population group belonging to Southern Punjab districts of Khanewal, Rajanpur and Multan had prevalence of 2.4%. This trend shows that prevalence of anti-HCV in the population group belonging to North of Pakistan is higher as compared to the one in Central Punjab, Southern Punjab and south.

HBV and HCV infections are a constant source of threat to the younger population. It is thus imperative that public campaign be launched to create awareness to masses. General education of the public can be very helpful in preventing the spread of HCV and HBV, which already has limited resources for health care. Both public and private sectors will have to go hand in hand to prevent these diseases attaining epidemic proportions.

REFERENCES


