



Abstract

Blood samples from patients visiting Mayo Hospital, Lahore were collected for the determination of HBsAg using rapid immunochromatographic method. The serum samples were further tested for the presence of RAF (rheumatoid arthritis factor) and ANA (antinuclear antibodies) by latex agglutination slide test. Male were observed to be more frequently infected as compared to the females as HBsAg positivity was seen in 60% males and 40% females. Highest frequency of infection was found in the age group of 26-35 which was 55%. Important risk factors contributing to HBV spread include socioeconomic status, family history of disease, smoking, job profile and associated diseases. 59% of hepatitis B patients were positive for RAF while only 10% had ANA positivity. For the determination of significant association between RAF and ANA with hepatitis, B chi-square test was used. A significant independence ($p=0.155$) was found between RAF and ANA in hepatitis B patients. Significant association of RAF and ANA in HBsAg positive patients was found with important risk factors such as gender, job profile of patient, associated diseases while significant independence was found in socioeconomic status, age and smoking. Z-test was used to assess proportion between two factors such as $p(\text{RAF}) - p(\text{ANA}) > 0$ in 100 hepatitis B patients, $p(\text{female}) - p(\text{male}) > 0$ among RAF positive cases, $p(\text{RAF}) - p(\text{ANA}) > 0$ among male positive patients, $p(\text{RAF}) - p(\text{ANA}) > 0$ in female positive patients. The noticed prevalence is gender- and age-dependent that might be due to their high exposures to the common risk factors. Affinity of RAF in hepatitis B patient is greater than affinity of ANA that enhance the complications in patients. So to avoid these complications proper awareness about HBV transmission and the possible risk factors and extension of immunization should be recommended.