

Seroprevalence of Hepatitis B and C Virus among Professional Blood Donors - A Single Centre Study of 135 Donors in Karachi

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Madam, Identification of hepatitis C virus (HCV) as a major causative organism of non-A, non-B hepatitis (NANBH) in the late 1980's and the development of a screening test has led to the introduction of routine tests for antibodies to HCV in 1991 in the U. K. and U.S.A¹. In Pakistan, apart from few voluntary blood bank services who have incorporated anti-HCV screening in 1994, majority of blood banks and transfusion services do not routinely perform pre-transfusion testing on all donations whether they are voluntary unpaid, directed donations or paid professional blood donations. A study was conducted to screen 135 registered professional blood donors for Hbs Ag and Anti HCV, in our hospital. Hepatitis B was tested by a third generation ELISA while hepatitis C by second generation ELISA technique (Abbott's Diagnostic Division). All positive donors were informed of their results and rejected for further donations. Of the 135 professional male blood donors, between 20-50 years of age, 43(31.8%) reacted positively for HBs Ag and anti-HCV. HBs Ag was reactive in 14(10.4%), anti-HCV in 28 (20.7%) and 1(0.7%) was seropositive for both. HIV was non-reactive in all. Blood transfusion is an important and established source of transmitting viral diseases to the recipient². Transfusion of unscreened blood products from professional blood donors has a 30% chance of transmitting these viruses to the recipients³. The seroconversion rate for HCV in the recipients is 40-93% and is a major cause of post-transfusion hepatitis¹⁻⁵. This study performed in one hospital gave a sero positive result in 30 percent donors. A high prevalence of HBV and HCV in our population makes screening of blood before transfusion mandatory. Funds for the purpose should be provided by the government and NGOs.

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References

1. Ayob, Y., Davidson, J., Baxter, A. al. Risk of hepatitis C in patients who received blood from donors subsequently shown to be carriers of hepatitis C virus. *Transfusion*, 1994;4:269-72.
2. Hoffbrand, A.V and Petit, i.E. *Essential haematology*. 3rd ed., Oxford, Blackwell Scientific Publications, 1993, pp.401-402.
3. Aoki, S.K., Holland, P.V., Fernando, L.P. et al. Evidence of hepatitis in patients receiving transfusion of blood components containing antibody to hepatitis C. *Blood*, 1993;82: 1000-5.
4. Van der Pol, CL., Reesink, H.W, Schaasberg, W. et al. Infectivity of blood seropositive for hepatitis C virus antibodies. *Lancet*, 1990;335:558-60.
5. Esteban, J.I., Esteban, R., Viladmiu, L. et al Hepatitis C virus antibodies among risk groups in Spain. *Lancet*, 1989;11:294-7.