

HCV Infection Among Healthy Blood Donors and Risk Groups in North India

Jindal N¹, Singh K¹, Aggarwal A¹ and Singla N²

¹ Department of Microbiology, Government Medical College, Amritsar

² Department of Microbiology, Government Medical College Hospital, Chandigarh, India

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To The Editor: Hepatitis C virus (HCV) infection is a leading cause of silent liver inflammation (hepatitis), scarring (cirrhosis) and hepatocellular carcinoma. Although it is primarily and efficiently transmitted through large and repeated percutaneous exposure to blood and blood products, overt percutaneous exposure cannot be identified in 10-50% of cases [1]. During the years 2004-2005, 31618 healthy blood donors (HBD), 157 intravenous drug abusers (IDUs) [2], 280 patients of chronic renal failure (CRF) on haemodialysis, 550 persons engaged in high risk sexual practices (HRSP) [2] and 130 patients of chronic liver disease (CLD) attending the tertiary care hospital attached to Government Medical College, Amritsar (Punjab; North India) were screened for anti- HCV antibodies using commercially available third generation anti- HCV ELISA kits (HCV Microlisa; J Mitra and Co. Ltd, New Delhi, India).

Table 1 shows that the prevalence of HCV antibodies in HBD is 1.76%. Hepatitis C accounts for 70-80% post transfusion non A-non B hepatitis cases in centres where only hepatitis B free blood is transfused [3]. In India, screening of blood for anti HCV antibodies is mandatory since 2004 [4]. By monitoring and strict enforcement of this law, transmission of HCV through blood transfusion could be reduced to a minimum. This has already been achieved in some western countries [3].

Table 1: Prevalence of antibodies in healthy blood donors and different risk groups

Group	Number tested	Number positive	% positive
Healthy blood donors	31618	559	1.76
Chronic renal failure patients on haemodialysis	280	96	34.3
Intravenous drug users*	157	53	33.75
Persons of high risk sexual practices*	550	15	2.72
Chronic liver disease patients	130	17	13.1

Among the various risk groups of patients screened, patients of CRF on haemodialysis were found to be at highest risk (34.3% prevalence- Table 1). This could be

the result of prolonged vascular access and exposure of these patients to contaminated medical equipment and other infected patients. In IDUs, the observed prevalence rate was 33.75% (Table 1) [2]. This high prevalence seems to be the result of direct percutaneous exposure due to sharing of contaminated needles. It has been reported that the seroconversion rate in IDUs is 20% per year and long term IDUs are almost invariably HCV infected [3]. Among the HRSP group, the positivity was 2.72% and it showed insignificant difference ($p > 0.05$) from that observed in HBD (1.76%). This indicates that sexual transmission is not a substantial contributor in the spread of HCV infection in our set-up. However, its prevalence of 13.1% in CLD patients shows that HCV infection, no doubt, is a major contributor to the burden of CLD and cirrhosis in this part of our country

Therefore, we conclude that there is definitely a big pool of HCV infected persons in North India who can act as a reservoir for its continuous transmission and are at risk of developing HCV related chronic disease. Although blood supply is being made safe by mandatory screening, the risk of HCV infection still remains through the use of non-sterile/improperly sterilized needles and equipment (medical and dental), sharing of needles, razors and tooth brushes, tattooing and other certain body piercing practices which are common in this region. Much of this could be prevented by implementing infection control practices in health care and other settings, proper counselling of persons with high risk drug and sexual practices and by professional and public health education.

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