Prevalence of Hepatitis B, C and HIV Virus Infection Among Beta Thalassaemia Major Patients

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Dear Madam, Beta thalassaemia is the most common inherited disorder in Pakistan. It is estimated that over 4000 thalassaemia children are born in Pakistan each year[1]. As thalassaemics are among the most transfused patients and therefore are most exposed to transfusion - transmitted infections, all these patients usually receive multiple blood tmnsfusions which in most cases are not screened or screened by cheaper and unreliable techniques. The identification of hepatitis B, C and HIV has resulted ma dramatic improvement in the safety of blood supply with a marked reduction in transfusion associated infections in the West[2,3]. Pakistan is a hyperendemic area for hepatitis B and C. The local figures are alanning among healthy or professional blood donors[4,5]. Prevalence of HBV, HCV and HIV in our population and specially among patients with multiple transfusions like beta thalassaemics should be known to avoid the spread of further blood borne infection of these viruses.

Recently we collected blood samples of 370 (215 male, 155 female) thalassaemics who were transfused blood from apparently healthy voluntary or family donors. All 370 samples were tested for HBsAg and HIV aintibiodies and 130 forantiHCV. HBsAg and HlV was testedusing3rdgenemtion ETA test kit and anti HCV antibodies were tested using Abbotts 2nd generation ETA test kit. A positive reaction was re-checked by repeattesting onthe sample. Out of 37O samples scatened for HBsAg, 18 (4.86%) were positive while out of 130 patients who were tested for anti HCV, 60(46.15%) were positivebut none was positive for HlV antibodies. One sample was tested positive for both HBsAg and anti HCV. With the advent of screening in many developed countries blood transfusion is no longer a mjaor route of transmission of these infections but in our country the risk of transfusion associated hepatitis is still very high. This study shows moderate to high infection of hepatitis B and C viruses among Beta thalassaemia major patients. Fortunately, there was no HIV positive samples. Besides lack of awareness, one of the major factor of using unscreened blood is the increasing cost of diagnostic kits. The cost can be minimize by using pooling techniques[6]. It should be made compulsory for all blood banks to provide properly screened blood and perform tests for HBV, HCV, HIV, VDRL and malarial parasite screening. We emphasize that life expectancy of transfusion dependent thalassaemia major patients can be improved by transfusing screened blood and blood products. It will be much cheaper to prevent these diseases rather than treat them.

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