Needle Pricks in Dialysis Population

S.	Saad	Al Shohaib
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King Khalid Hospital, National Guard, Jeddah, Saudi Arabia

Dr. Saad Al Shohaib, Consultant Nephrologist, National Guard, King Khalid Hospital, PO Box 9515, Jeddah 21423 (Saudi Arabia)

Dear Sir,

The prevalence of hepatitis C is variable in the hemodialysis population [1-3]. In Saudi Arabia, it ranges from 40 to 50%. Needle pricks have a low incidence of transmitting the virus in non-dialysis patients. However, in our Unit, we have had two incidents of needle pricks and both have resulted in transmission of the infection to the staff involved.

The first is a 26-year-old House Officer who was previously healthy. He had a needle prick while trying to draw blood from a hepatitis C-positive patient. That particular patient was on dialysis for 7 years and received 8 units of blood before the introduction of erythropoietin.

Two months later, he had acute hepatitis. Hepatitis C antibody became positive, PCR positive, liver enzymes were 4 times the normal, and bilirubin increased to $> 40 \text{ mmol/l}$. He was followed up for 6 months. Liver biopsy showed evidence of chronic active hepatitis and he was started on Interferon with a good response, as indicated by improvement in his liver enzymes and a negative PCR.

The second case is a 27-year-old male nurse who had a needle prick whilst dialysing a 75-year-old lady. This lady is known to have hepatitis C. She received more than 8 units of blood prior to the introduction of erythropoietin 4 years ago. Her liver enzymes had been normal and no liver biopsy had been performed on this lady.

At the time of the needle prick, hepatitis C antibodies were checked with liver function test and all of these were normal. Three months later, the hepatitis antibody was checked and found to be positive. Liver enzymes were raised more than twice the normal values for another 3 months. A liver biopsy was done and showed chronic active hepatitis and he was started on Interferon.

These 2 cases illustrate that there is a risk of acquiring hepatitis C in the hemodialysis population. The risk of acquiring this virus through needle prick is small in the nondialysis population. It is possible that the virus load in the dialysis population is larger and therefore the chances of acquiring the infection through needle prick are greater.

We feel that precautions should be taken when handling these patients. The chances of acquiring hepatitis C from such patients are greater than from other patients and more measures should be taken to avoid this risk to staff.

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