A case of liver cirrhosis caused by chronic B hepatitis after kidney transplantation in an HBsAg negative recipient

AYOUNG CHO, HYUN JU YOON, IN O SUN, KWANG YOUNG LEE
Department of Internal Medicine-Nephrology, Presbyterian Medical Center, Korea, Republic of

Case Study: Introduction
The rate of hepatitis B reactivation after kidney transplantation has not been well defined. Data is limited to few case reports and studies; the incidence of reactivation varies from 0% to 4%. We report a case of liver cirrhosis caused by chronic B hepatitis after kidney transplantation in a patient who did not have HBsAg before.

Case presentation
A 68-year old man was admitted for abdominal distension for 2 weeks. He had received a deceased-donor renal allograft 3 years previously and had maintained a relatively stable serum creatinine level (1.6-1.8 mg/dL). His original renal disease was IgA nephropathy. He received triple immunosuppression with tacrolimus, MMF and prednisolone. At the time of transplantation, HBsAg and HBsAb were negative in both the donor and the recipient. On admission, he had a temperature of 36.7 ºC, pulse rate of 74 beat/min, blood pressure of 114/71 mmHg, and respiratory rate 20/min. His lower extremities showed grade 1 pretibial pitting edema. Ultrasonography showed favorable perfusion in the transplant kidney. However, chronic hepatitis and moderate ascites were observed on computed tomography. The blood urea nitrogen and serum creatinine concentrations were 24 mg/dL and 1.6 mg/dL, respectively. His serum AST and ALT were 57 U/L and 20 U/L, respectively. The serology results were HBsAg positive, HBsAb negative, HBV DNA of 25,700 x 10^3 UI/mL. His Child-Pugh score was B with a serum albumin 3.4 g/dL and an international normalized ratio of 1.31. His high serum-ascites albumin gradient (2.5 g/dL≥1.1 g/dL) and low ascitic total protein (1.2 g/dL<2.5 g/dL) suggested liver cirrhosis. After diagnosis of reactivation of chronic B hepatitis, the patient had received entecavir.

Conclusion
It is important to monitor HBsAb titers regularly in kidney transplant recipients. If the antibody titer is below 10 mL/U, HBV vaccination must be done before kidney transplantation.