

HBsAg 양성 공여자로부터 HBsAg 음성 및 anti-HBs 양성 혹은 음성인 수여자로의 생체 신장이식

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Living Donor Kidney Transplantation from HBsAg(+) Donor to HBsAg(-) Recipient with or without anti-HBs

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Background: HBsAg positivity is currently regarded as a contraindication of kidney donation to HBsAg negative patients. We developed a protocol that enables transplantation from a HBsAg (+) living donor to a HBsAg (-) recipient.

Methods: Transplant candidates without protective titer (≥ 10 mIU/ml) of anti-HBs antibody were given hepatitis B vaccination to develop protective level of antibody. Viral load of donors was reduced by entecavir to be undetectable by real time PCR before transplantation. Recipients were also given entecavir before and during 3 months after transplantation for prophylaxis. Hepatitis B immune globulin was injected intravenously to recipients in the morning of transplant day.

Results: Seven living donor kidney transplantations from HBsAg(+) donor to HBsAg(-) recipient were performed. Anti-HBs was positive in 6 recipients and negative in 1 recipient at initial presentation. In the anti-HBs(-) recipient, hepatitis B vaccination was administrated, and anti-HBs became positive (15 mIU/ml) before transplantation. All the recipients had undetectable HBV DNA after transplantation and remained HBsAg(-)/anti-HBs(+) during the median follow up of 37 (11-61) months.

Conclusion: Kidneys from HBsAg(+) living donors can be safely transplanted to HBsAg(-) recipients with or without anti-HBs.

Key Words: HBsAg 양성 공여자, HBs 음성 수여자, 신장이식

HBsAg positive donor, HBsAg negative recipient, Kidney transplantation