

## HBs Ag 양성 공여자로부터 HBS Ag 음성 수혜자로의 생체 신이식

BHS 한서병원 신장내과<sup>1</sup>, 외과<sup>2</sup>, 메리놀병원 신장내과<sup>3</sup>

손승현<sup>1</sup>, 공진민<sup>1</sup>, 권혁용<sup>1</sup>, 정준현<sup>2</sup>, 이동렬<sup>3</sup>, 안정명<sup>3</sup>

### Living Donor Kidney Transplantation from HBsAg (+) Donor to HBsAg (-) Recipient

Sung Hyun Son<sup>1</sup>, Jin Min Kong<sup>1</sup>, Hyukyong Kwon<sup>1</sup>, Joon Heun Jeong<sup>2</sup>  
Dong Ryul Lee<sup>3</sup>, Jungmyung Ahn<sup>3</sup>

BHS HanSeo Hospital Nephrology<sup>1</sup>, Surgery<sup>2</sup>  
Maryknoll Hospital Nephrology<sup>3</sup>

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

**Methods:** Transplant candidates without protective titer ( $\geq 10$  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 to recipients intravenously in the morning of transplant day.

**Results:** Six living donor kidney transplantations in 5 patients from HBsAg (+) donor to HBsAg (-) recipient were performed. In 5 transplantations, recipient had protective titer of antibody at initial presentation. One patient had low titer of anti-HBs (7mIU/ml), which was raised by hepatitis B vaccine to protective level (15mIU/ml) before transplantation. All the recipients had undetectable HBV DNA after transplantation and remained HBsAg (-)/anti-HBs (+) during the median follow up of 21 (4-40) months.

**Conclusions:** Kidneys from HBsAg (+) living donors can be safely transplanted to HBsAg (-) recipients.

**Key Words:** HBs Ag 양성 공여자, HBs Ag 음성 수혜자, 신이식

HBs Ag positive donor, None HBs Ag recipient, Transplantation