

간이식후 발생한 이식간 기능부전 치료로써 MARS의 역할

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Molecular Adsorbents Recirculating System (MARS) Dialysis for Graft Dysfunction after Liver Transplantation : Single Center Experience

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Background : Extracorporeal liver support using the Molecular Adsorbents Recirculating System (MARS) recently has shown remarkable results in liver failure. However, there is still a lack of studies of MARS in patients who suffer from graft dysfunction after liver transplantation. We reported here our experience with the use of MARS in patients with graft dysfunction after liver transplantation.

Methods : From January 2002 to December 2006, a total of 43 sessions were performed on 15 patients. The course of MARS after liver transplantation included graft dysfunction (acute rejection (n=5), chronic rejection (n=2), ischemia (n=5), graft failure (n=2), recurrence of hepatitis B virus (n=1)) with hyperbilirubinemia (bilirubin >15 mg/dL).

Results : MARS showed significant reduction in total bilirubin ($p<0.01$), serum ammonia ($p=0.02$), blood urea nitrogen ($p<0.01$), and creatinine ($p<0.01$). Also, the hemodynamic data show a significant improvement of mean arterial pressure ($p=0.05$). Among 15 patients, four patients were survived after MARS without retransplantation. The 60- day survival rate was $53.3 \pm 12.9\%$. Neither significant technical problems nor adverse effects occurred by using MARS.

Conclusion : It is difficult to determine that MARS dialysis can improve survival and recovery from graft dysfunction. However, our results indicated that MARS may effectively improve serum biochemical and hemodynamic state in patients with graft dysfunction after liver transplantation.

Key Words : 간이식, 이식간 기능부전, MARS

Liver transplantation, Graft dysfunction, MARS