
LV OP 1-5**The outcomes of liver transplantation using the graft of Protein S-deficient living donor**

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Introduction : The choice of donor in liver transplantation should be done very carefully. However, the feasibility of liver transplantation is controversial in the case of donors that meet all other conditions but only have coagulation disorder. Among them, we analyzed the influence of Protein S on living donor liver transplantation.

Methods : In this study, we analyzed 837 cases of liver transplantation proceeded between Dec, 2006 and Mar, 2016. Protein S deficiency was found in 78 donors. We compared the effects of protein S deficiency on the coagulopathy - related complications of donor and recipient in perioperative period.

Results : The mean values of protein S and protein C of protein S deficient donors were 62.9 and 100.8, respectively. It was significantly low compared to normal range group(98.6 and 106.8, p value < 0.05). 4 of the donors and 7 recipients underwent postoperative bleeding in low protein S group. But there no statistically significance compared to normal range group. We experienced 39 cases of arterial re-anastomosis either intraoperatively or postoperatively because of hepatic artery thrombosis, 9 cases for protein S deficient group(11.5%) and 30 for normal range group(4%) showing significant difference. In multivariate analysis, the degree of low protein S level was found to be a significant risk factor for hepatic artery thrombosis.

Conclusions : In liver transplantation with a donor who has protein S deficiency, we should keep in mind the possibility of hepatic arterial thrombosis. And it seems to be unnecessary to use anticoagulants to prevent thrombosis in the donor with low protein S level.

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