The 13th International Single Topic Symposium (ISTS 2018)

Bridge over Posthepatectomy Liver Failure

E37

Transplantation using a marginal donor in a single center

Ho-sung Son¹, Dong-hoon Shin², Young-il Choi³, and Hyung-hwan⁴

¹ Department of Surgery, Kosin University Gospel Hospital, Kosin University College of Medicine, Busan, Korea *md8044@naver.com

Purpose:

Liver transplantation is an established treatment for patients with end-stage liver disease. The use of marginal grafts is becoming increasingly common around the world in situations where many organ transplants are waiting. We have analyzed the performance of a single center over the past three years to analyze the results obtained using the commonly used "marginal donor".

Methods:

We retrospectively analyzed the results of all liver transplant follow-up performed in a single center from 2015 to 2018. We evaluated the quality of the graft according to several scoring systems. we gave a score of 1 for the following characteristics: donor > 60 years, orotracheal intubation period > 4 days, cold ischemia time > 13 hours, hepatic macrosteatosis $\ge 30\%$, bilirubin > 2.0 mg/dl, alanine aminotransferase (ALT) > 170 U/l and aspartate aminotransferase (AST) > 140 U/l.

We gave a score of 2 to the following: use of vasopressor drugs (dopamine > 10 mg/kg or any dose of noradrenalin or dobutamine) and serum sodium > 155 mEq/l.

We defined marginal liver when the score was 3 or more.

Results:

We performed a total of 14 deceased-donor liver transplantations. 6 of these were in the standard group and 8 were in the marginal group. There was no difference in age, sex, MELD score, and hospital stay between the two groups, and postoperative complications were similar. However, in the marginal liver group, overall recipient survival was lower within 1 month after transplantation. The recipient survival after one month was not different between the two groups.

Conclusion:

Although liver transplantation used marginal liver showed an increase in early mortality, it showed acceptable overall survival.