Peer Review File

Article Information: http://dx.doi.org/10.21037/atm-20-5618

Reviewer A

Reviewer's Comment: They do not mention the number of cases that died during the operation. The etiology is explicit in the cases that died, but the general list of the etiology is missing. Are there no cases of HCV? of NASH? Are there cases of fulminant hepatitis?

Reply: Thank you for your suggestions. There were no cases died intraoperatively in the last 5 years. We have added some statement in our manuscript in according to your suggestion. (see Page 10-11, line 273-274)

The general list of the etiology was added as your suggestion. (see Page 12, line 222-229).

Reviewer's Comment: There is no mention of obesity, diabetes mellitus or arterial hypertension in the recipients.

Reply: The mean BMI was 24.4 ± 3.8 kg/m2 (range, 15.4–38.5 kg/m2), and 45 patients with the BMI more than 30 kg/m2. Diabetes mellitus was confirmed in 197 patients, hypertension in 152 patients, cardiopathy in 41 patients. We have revised the manuscript as your suggestion. (see Page 10-11, line 220-222)

Reviewer's Comment: There is no report of thrombosis of the hepatic artery.

Reply: This is a very good question, and thank you for your comment. Thrombosis of hepatic artery was not a common complication in our center, only 2 patients were confirmed as thrombosis of hepatic artery about one week after operation. The 2 patients received thrombolytic therapy. No serious adverse consequences happened thanks to early detection. Because the purpose of this study was mainly to explore the mortality, we did not list the complications in the result section.

Reviewer's Comment: It would be important to know the general etiology of the cases and comorbidities

Reply: Thank you for your reminder, we have added these data in result section. (see Page 10-11, line 220-229)

Reviewer's Comment: Explain the high cardiovascular mortality.

Reply: Thank you for your question. Actually, we have discussed this question in our center more than once. The reasons were summed up as follows: firstly, the relatively higher incidence of cardiovascular disease such as hypertension and cardiopathy. Secondly, cerebrovascular malformation such as aneurysms was confirmed in several patients before operation. Thirdly, the duration to reopening portal vein, severe intraoperative hypotension could be induced if the duration was too short, meanwhile too much cold perfusate would influence the myocardial function.

Reviewer's Comment: why do patients with HCV and NASH not appear on the mortality list?
Reply: In this study, there were no patients with HCV or NASH died in-hospital after operation. We have listed these patients with HCV or NASH in result section. (see Page 11, line 223, 228)

Reviewer's Comment: Could intrahepatic cholangiopathy, more frequent in DCD cases, have an implication in infections?
Reply: Thank you for your comment. Compared to DBD, DCD cases really had a relatively higher incidence of intrahepatic cholangiopathy including non-anastomotic biliary strictures. Excepting the deaths, the incidence of intrahepatic cholangiopathy was about 16%. Unfortunately, the correlation between intrahepatic cholangiopathy and infection was not analyzed in this study. Thank you again for you question, it gave us a very good idea to conduct another study.

Reviewer's Comment: Line 364 is PGD and not PDG.
Reply: Thank you for your help, we have revised it in manuscript. (see Page 18, line 384)

Reviewer B
Reviewer's Comment: The authors should describe DCD donor procedure including warm ischemia during procurement of the graft liver and DCD allocation system in China (any difference DBD and DCD).
Reply: The allocation of organ abides by the Basic Principles and Core Policies about Allocation and Sharing of Human Organ in China. China Organ Transplant Response System (COTRS) is used for the allocation of organs. OPO Coordinators assess the patient's condition, basic life support will be provided if the patient is suitable for organ donation. Organ procurement will be carried out when cardiac arrest. Open the abdominal cavity after standing in silent tribute, blood was expelled from inferior vena cava, and irrigation Solution was perfused through abdominal aorta. Hepatic perfusion through portal vein was carried out following aorta perfusion. The next step was the transection of perihepatic ligaments followed by removement of liver. (see Page 7, line 145-148)

Reviewer's Comment: What kind of antibiotics, antifungal and antiviral prophylaxis applied in your institution?
Reply: Before acquirement of bacterial culture results of drainage, sputum and urine, Second-generation cephalosporins was used empirically after LT. Antibiotics were changed in according to drug sensitivity results. Antifungal and antiviral drugs were not applied preventively. Voriconazole or Caspofungin was selectively used for fungal infection most frequently when detecting the evidence of fungal infection. Ganciclovir or Aciclovir was selected for viral infection.

Reviewer's Comment: How about the incidence of acute cellular rejection in this study population. Concern exist over immunosuppression in initial phase, in which Bsilliximab+ Tac+ MMF + mToR were used in most of the cases. Is there any difference regarding infectious complications among immunossupression protocol you applied?
Reply: It is my mistake for making vague description. We do not used the protocol of Bsilliximab+ Tac+ MMF + mTOR. Bsilliximab is used during operation and on the fourth day after LT. Methylprednisolone + Tac is Used for most patients. For patients with malignancy tumor, only Tac is applied. In according to the plasma concentration and biochemical test, Tac may be changed to Ciclosporin or combined use MMF. For patients with liver cancer, Methylprednisolone is prohibited, sirolimus is used about two months later. (see Page 8, line 166-174)
The incidence of acute cellular rejection is about 10%.

Reviewer's Comment: The authors should provide data about the cause of cardiac arrest of the DCD donors.
Reply: Thank you for your suggestions. The main cause that led to cardiac arrest of the DCD donors was cerebral hemorrhage including spontaneous cerebral hemorrhage and traumatic intracranial hemorrhage. We have revised our manuscript as your suggestions. (see Page 12, line 242-245)

Comment: Since the IF of journal is 3.297, I do believe the manuscript should be majorly revised according to the reviewer's comment.
Reply: Thank you for your kindly help, we have revised it as your comments.