

March 28, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: ESPS Manuscript No.9335-Review.doc).

Title: Portal Vein Arterialization Technique For Liver Transplantation Patients

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Name of Journal: *World Journal of Gastroenterology*

ESPS Manuscript NO: 9335

The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) Hormone impact treatment (urbason, 300mg/d for three days).

(2) The patient gave up therapy sixty days after transplantation because of severe pulmonary infection and acute renal failure and died of these two diseases before long.

(3) ALT, AKBR and oxygen partial pressure of portal vein and hepatic vein were significantly improved. Acute hepatic failure could be effectively prevented through increasing oxygen supply after portal vein arterialization^[4]

(4) and liver cells' energy metabolism could be improved effectively: compared to nonarterialization group, the serum AST and ALT of arterialization group showed no significant difference on the 2nd hour after the operation (P>0.05), but serum AST and ALT were significantly decreased on the 12th hour in arterialization group (P<0.01 and P<0.05). Compared with nonarterialization group, the ATP content of liver tissue and EC value were significantly increased on the 2nd, 6th and 12th hour in arterialization group (P<0.01 and P<0.05). Hepatic pathological changes were exacerbated progressively with the prolonged duration of ischemia in nonarterialization group, while the injury of hepatic cells in arterialization group was mild^[5].

(5) Overperfusion of arterial blood into the liver by portal vein might bring some harmful effects, especially the increasing of the liver cirrhosis^[8].

(6) Portal vein arterialization results in acceptable rates of survival in relation to spontaneous outcomes in patients with completely de-arterialized livers. The management of complications (especially PHT) after the procedure is challenging. Portal vein arterialization may represent a salvage option or a bridge to liver retransplantation and thus may make curative resection in locally advanced HPB cancers with vascular involvement feasible^[9].

3 References and typesetting were corrected.

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,

Kun Zhang M.D

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