

Dear Editor and Reviewers,

Thank you very much for all your comment and suggestions. We have added and modified some parts according to your suggestions. Our responses to the reviewers' comments are as follows:

Reviewer 1: The authors demonstrated that safety and efficacy of transjugular intrahepatic portosystemic shunt combined with palliative treatment in patients with HCC. They divided the patients into two group: Group A, the patients with portal hypertension and HCC who were treated with TIPS plus palliative treatment and RFA and Group B, those without TIPS placement, and received palliative treatment and RFA. They showed that the mortality rate from VB in Group A was higher than in Group B. However, they conclude that TIPS combined with palliative treatment is safe and effective for portal hypertension in patients with HCC. 1) The author should show the reason why TIPS is contraindicated in patients with liver cancer. 2) The author should clearly show the indication of the TIPS. 3) I think that there is alternative therapy instead of TIPS to reduce portal hyper tension in patients with HCC. The authors should discuss it.

1). The author should show the reason why TIPS is contraindicated in patients with liver cancer.

Response: Because of the risk of postoperative liver failure, severe complications and low survival rate of HCC patients, TIPS is contraindicated in patients with portal hypertension and liver cancer.

2) . The author should clearly show the indication of the TIPS.

Response: The indications for the TIPS included HCC with portal hypertension-related complications such as recurrent VB after variceal sclerotherapy, RA or both, which required TIPS placement.

3). I think that there is alternative therapy instead of TIPS to reduce portal

hypertension in patients with HCC. The authors should discuss it.

Response: Portal hypertension and HCC are common late complications of liver cirrhosis and sometimes occur simultaneously ^[10]. There are various treatments for HCC, depending on the nature of the tumor, and TAE/TACE and RFA have become important approaches in recent years, along with RFA for small HCC^[11]. The treatment of portal hypertension included administration of oral medicine, such as non-selective beta blockers (NSBB), and surgical shunts, but TIPS is used more widely due to its safety and effectiveness in patients complicated with portal hypertension. However, according to the current guidelines for the treatment of portal hypertension, TIPS is contraindicated in patients with liver cancer.

Reviewer 2: I got acquainted with great interest with a retrospective study of Dr. S.H. Luo et al., showing the safety and efficacy of TIPS in combination with palliative treatment for portal hypertension (PH) in patients with hepatocellular carcinoma (HCC). Indeed, recent studies have shown that the lower risk of death associated with TIPS was similar among cirrhotic patients with or without HCC. However, currently due to the danger of severe complications, the use of TIPS is discussed for small subpopulations of patients with HCC who have bled from varices while on non-selective beta blockers (NSBB) prophylaxis. In this regard, I would like to clarify whether patients received NSBB therapy (+ endoscopic variceal ligation)? Please explain the lack of information about this in the text of the manuscript.

Response: Yes, the patients received NSBB therapy + endoscopic variceal ligation. The indications for TIPS were HCC with portal hypertension-related complications, such as recurrent VB after NSBB therapy and variceal sclerotherapy, RA or both, which required TIPS placement.

I also suggest to explain why the patients were not on the waiting list for liver transplant. Indeed, currently HCC is the fastest growing indication for liver transplant worldwide.

Response: This was a retrospective study that compared the clinical efficacy of the

combination of TIPS, TACE, RFA and palliative treatment in liver cirrhosis complicated with HCC. The patients were divided into two groups. Group A comprised patients with portal hypertension and HCC who were treated with TIPS plus palliative treatment and RFA. Group B comprised a cohort of patients with HCC and portal hypertension who did not undergo TIPS placement, and received palliative treatment and RFA. HCC is the fastest growing indication for liver transplant worldwide, however, this study excluded the patients who had undergone liver transplantation.

The present study is limited by its retrospective design, small number of patients, and inclusion of patients from a single institution. Larger series and multicenter trials with a prospective design are required to validate the results obtained assumptions.

Response: Although TIPS showed several advantages in this study, there were still some limitations to this study, e.g., it was a single-center study with a small sample size. Overall, this study demonstrates that TIPS treatment can better control the symptoms of portal hypertension in patients with both portal hypertension and liver cancer, while further treatment of liver cancer can improve survival rates. For these reasons, the TIPS is recommended for further study in multicenter studies with a larger sample size.