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Reviewer Comments

I have read with great interest the article untitled “Impact of preoperative transjugular portosystemic shunt on postoperative outcomes following non-transplant surgeries in patients with decompensated cirrhosis”. The authors perform a retrospective study with the aim of providing more information about the results in abdominal non-transplant surgery in cirrhotic patients after a TIPS placement. The design of the study is a case-control study. A group of cirrhotic patients without TIPS submitted to abdominal surgery are used as controls.

Although the study has limitations (it is unicentric, retrospective, and the control group cannot offer excellent match, considering liver function neither type of surgery), it provides more data about the use of TIPS before surgery, which is a hot topic. There are few previous studies. Despite there is one recent study, larger and with a similar design (Tabchouriet al, mentioned later), the present work achieves to provide more information. Authors have included 20 patients, which is a quite good number. The follow-up considering survival is larger to previous works. Also, authors are aware and point out the limitations of the study and try to solve the problem with a sub-analysis focus on those TIPS placed closer to surgery.

Thank you for your comments,

Indications to TIPS placement should be detailed (especially if they were others different to surgery).

Added under patient characteristics:

“Indications for TIPS included refractory ascites in 55% (11/20) and variceal bleeding in 10% (2/20). The other seven patients (35%) had TIPS placed due to elevated portal pressures to facilitate surgery.”

In table 1, in which pre-operative characteristics are detailed, TIPS group had more ascites. I suppose this is previous history, before TIPS placement. An explanation could be added in patients’ characteristics.

Addressed: Statement added to clarify that ascites was present before TIPS.

Data about the percentage of patients with Clinically Significant Portal Hypertension

(CSPH) could also be included in TIPS placement information.

Addressed:

“All but one patient had evidence of Clinically Significant Portal Hypertension (CSPH), defined by a HVPG ≥ 10 mm Hg. One patient had a HVPG of 9 mmHg, and TIPS was placed for variceal bleeding.”

In the Kaplan Meyer curve (fig 1) 17 patients arrive at month 12. However, in the text (page 10), it is explained the death of 4 patients. Please, check and clarify. Also, in the no TIPS group, only 2 patients die, although 12 patients are at risk at the end of the 12 months follow-up period (fig 1). No information about lost in follow-up is provided.

Addressed:

The mentioned sentence has been revised to clarify as per the reviewer's recommendation:

“In total, 6 patients died (2 in the no TIPS group and 4 in the TIPS group). At 12 months follow-up, 1 in the no TIPS group died (with 5 other patients having follow-up time <12 months) versus 3 in the TIPS group ($p=0.36$)”

In table 2, row with Death (alive/death data) is redundant, as it is repeated in One year survival row.

Addressed:

Reply: The “Death” variable in Table 2 (Alive vs. Dead) indicates the overall death while the “One year survival” variable represents the outcome at one year. We have changed “Death” to “Overall mortality” to clarify the issue.

Change in the text: We have changed “Death” to “Overall mortality” in Table 2.

In the footprint of the tables, should be specified not only frequencies and % but also if mean, minimum and maximum value are reflected.

Addressed

“Values are as frequency and % unless otherwise specified; TIPS, transjugular intrahepatic portosystemic shunt” at the bottom of table 1.)

All tables have been changed to add this.

I recommend to shorten the abstract to add a short sentence about results in secondary aims.

Addressed: The abstract has been shortened .

I encourage the authors to add as part of their bibliography the paper from Reverter et al (Reverter E., Cirera I., Albillos A., Debernardi-Venon W., Abraldes J.G., Llop E. The prognostic role of hepatic venous pressure gradient in cirrhotic patients undergoing elective extrahepatic surgery. J Hepatol. 2019;71(5):942–950) in which a cut-off ≥ 16 mmHg was suggested as predictor of high surgical risk.

Addressed

Added to discussion

“A recently published prospective study evaluating risk factors for patients with cirrhosis undergoing surgery showed that an HVPG >16 mmHg was associated with a high risk of post-surgical mortality”

Also, it is mandatory to mention the work from Tabchouriet et al (Tabchouri N., Barbier L., Menahem B., Perarnau J.M., Muscari F., Fares N. Original study: transjugular intrahepatic portosystemic shunt as a bridge to abdominal surgery in cirrhotic patients. J Gastrointest Surg. 2019;23(12):2383–2390), as this is the first case-control study performed in the similar terms.

Inserted in Introduction:

“The largest case control study to date by Tabchouriet et al comparing patients with cirrhosis who underwent preoperative TIPS to controls without TIPS showed no significant differences between the two groups in postoperative complications or 90 day mortality.”

Citations have been added and re-numbered for the above two comments.