



Transjugular intrahepatic portosystemic shunt: A promising therapy for recompensation in cirrhotic patients

Ya-Ni Jin, Wei Zhang

Specialty type: Gastroenterology and hepatology

Provenance and peer review:

Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Grade A (Excellent): 0
Grade B (Very good): 0
Grade C (Good): C
Grade D (Fair): 0
Grade E (Poor): 0

P-Reviewer: Giri S, India

Received: January 16, 2024

Peer-review started: January 16, 2024

First decision: February 26, 2024

Revised: March 7, 2024

Accepted: April 2, 2024

Article in press: April 2, 2024

Published online: April 28, 2024



Ya-Ni Jin, Wei Zhang, Department of Gastroenterology, Nanjing Drum Tower Hospital, Affiliated Hospital of Medical School, Nanjing University, Nanjing 210000, Jiangsu Province, China

Corresponding author: Wei Zhang, MD, PhD, Department of Gastroenterology, Nanjing Drum Tower Hospital, Affiliated Hospital of Medical School, Nanjing University, No. 321 Zhongshan Road, Nanjing 210000, Jiangsu Province, China. kimmysai@126.com

Abstract

This is a retrospective study focused on recompensation after transjugular intrahepatic portosystemic shunt (TIPS) procedure. The authors confirmed TIPS could be a treatment for recompensation of patients with cirrhosis according to Baveno VII. The paper identified age and post-TIPS portal pressure gradient as independent predictors of recompensation in patients with decompensated cirrhosis after TIPS. These results need to be validated in a larger prospective cohort.

Key Words: Cirrhosis recompensation; Transjugular intrahepatic portosystemic shunt; Portal pressure gradient; Predictor factor; Baveno VII

©The Author(s) 2024. Published by Baishideng Publishing Group Inc. All rights reserved.

Core Tip: Approximately one-third of the patients experienced cirrhosis recompensation following transjugular intrahepatic portosystemic shunt (TIPS) and post-TIPS portal pressure gradient reduction below 12 mmHg contributes to the occurrence of recompensation. The selection of a smaller diameter (6 mm) stent may be an effective measure to reduce portal vein pressure while decreasing the incidence of postoperative hepatic encephalopathy.

Citation: Jin YN, Zhang W. Transjugular intrahepatic portosystemic shunt: A promising therapy for recompensation in cirrhotic patients. *World J Gastroenterol* 2024; 30(16): 2285-2286

URL: <https://www.wjgnet.com/1007-9327/full/v30/i16/2285.htm>

DOI: <https://dx.doi.org/10.3748/wjg.v30.i16.2285>

TO THE EDITOR

Cirrhosis recompensation, as defined by the Baveno VII consensus, refers to a condition in which patients with decompensated cirrhosis exhibit stable improvement in liver function without any episodes of decompensation over an extended period, following effective etiological therapy[1]. Effective etiological treatment is paramount for recompensation and involves sustained alcohol abstinence in cases of alcohol-induced cirrhosis, sustained viral suppression in hepatitis B-related cirrhosis, and viral elimination in hepatitis C-related cirrhosis. However, research on the recompensation of cirrhosis due to other causes remains scarce.

The transjugular intrahepatic portosystemic shunt (TIPS) procedure reduces the portal pressure gradient (PPG) and is primarily utilized to manage various complications of portal hypertension in cirrhotic patients, such as esophagogastric variceal bleeding and refractory ascites. Thus, TIPS may promote recompensation in patients with decompensated cirrhosis. The study by Gao *et al*[2] was pioneering in investigating the impact of TIPS on recompensation across different etiologies of decompensated cirrhosis. Their findings indicated that approximately one-third of the patients achieved cirrhosis recompensation following TIPS and identified a postoperative PPG of less than 12 mmHg as an independent predictor of cirrhosis recompensation. Although a reduction in PPG is associated with a decreased risk of variceal rebleeding, the risk of hepatic encephalopathy post-TIPS escalates with the magnitude of PPG reduction[3], potentially impeding recompensation. Consequently, employing small-diameter (6-mm) stents may be an effective strategy to mitigate portal hypertension and minimize the risk of postoperative hepatic encephalopathy, warranting further investigation. Additionally, the findings of this study necessitate validation in a larger, prospective cohort due to its limited sample size and retrospective nature. Furthermore, including only TIPS patients limits the study; comparing the recompensation frequency between TIPS and non-TIPS groups could elucidate the procedure's facilitative role in cirrhosis recompensation. Future research should elucidate how TIPS influences recompensation across various cirrhosis etiologies, with a focus on developing tailored treatment strategies to enhance patient outcomes.

FOOTNOTES

Author contributions: Jin YN wrote the letter; Zhang W revised the letter.

Conflict-of-interest statement: All the authors declare that they have no competing interests.

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <https://creativecommons.org/licenses/by-nc/4.0/>

Country/Territory of origin: China

ORCID number: Wei Zhang 0000-0003-0381-0773.

S-Editor: Qu XL

L-Editor: A

P-Editor: Chen YX

REFERENCES

- 1 de Franchis R, Bosch J, Garcia-Tsao G, Reiberger T, Ripoll C; Baveno VII Faculty. Baveno VII - Renewing consensus in portal hypertension. *J Hepatol* 2022; **76**: 959-974 [PMID: 35120736 DOI: 10.1016/j.jhep.2021.12.022]
- 2 Gao L, Li MB, Li JY, Liu Y, Ren C, Feng DP. Impressive recompensation in transjugular intrahepatic portosystemic shunt-treated individuals with complications of decompensated cirrhosis based on Baveno VII criteria. *World J Gastroenterol* 2023; **29**: 5383-5394 [PMID: 37900585 DOI: 10.3748/wjg.v29.i38.5383]
- 3 Liao Y, Zhang L, Wang JT, Yue ZD, Fan ZH, Wu YF, Zhang Y, Dong CB, Wang XQ, Cui T, Meng MM, Bao L, Chen SB, Liu FQ, Wang L. A novel nomogram predicting overt hepatic encephalopathy after transjugular intrahepatic portosystemic shunt in portal hypertension patients. *Sci Rep* 2023; **13**: 15244 [PMID: 37709823 DOI: 10.1038/s41598-023-42061-w]



Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA

Telephone: +1-925-3991568

E-mail: office@baishideng.com

Help Desk: <https://www.f6publishing.com/helpdesk>

<https://www.wjgnet.com>

