

Hepatic recompensation according to Baveno VII criteria via transjugular intrahepatic portosystemic shunt

Hossam Eldin Shaaban, Abeer Abdellatef, Hussein Hassan Okasha

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): B
Grade C (Good): C, C
Grade D (Fair): D
Grade E (Poor): 0

P-Reviewer: Gaman MA, Romania; Mahmoud MZ, Saudi Arabia; Wani I, India

Received: October 29, 2023

Peer-review started: October 29, 2023

First decision: December 6, 2023

Revised: December 30, 2023

Accepted: February 20, 2024

Article in press: February 20, 2024

Published online: March 28, 2024



Hossam Eldin Shaaban, Department of Internal Medicine and Gastroenterology, NHTMRI, Cairo 11796, Egypt

Abeer Abdellatef, Hussein Hassan Okasha, Department of Internal Medicine, Division of Gastroenterology and Hepatology, Kasr Al-Aini School of Medicine, Cairo University, Cairo 11562, Egypt

Corresponding author: Hossam Eldin Shaaban, FACG, FASGE, MD, MSc, PhD, Doctor, Department of Internal Medicine and Gastroenterology, NHTMRI, No. 10 Kasr Alainy Street, Cairo 11796, Egypt. hshaaban@aol.com

Abstract

Transjugular intrahepatic portosystemic shunt is a therapeutic modality done through interventional radiology. It is aimed to decrease portal pressure in special situations for patients with decompensated liver disease with portal hypertension. It represents a potential addition to the therapeutic modalities that could achieve hepatic recompensation in those patients based on Baveno VII criteria.

Key Words: Decompensated liver cirrhosis; Hepatic recompensation; Baveno VII; Portal hypertension

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

Core Tip: Liver cirrhosis is a complication of chronic liver disease. Hepatic decompensation follows a period of compensation if the etiology of the chronic liver disease is not eliminated and the liver inflammation is persistent. Hepatic recompensation is a novel term in which decompensation reverses after the clearance of the etiological factors in some patients. The use of a transjugular intrahepatic portosystemic shunt is a potential addition to achieve recompensation in a subset of patients with portal hypertension as demonstrated in published research.

Citation: Shaaban HE, Abdellatef A, Okasha HH. Hepatic recompensation according to Baveno VII criteria *via* transjugular intrahepatic portosystemic shunt. *World J Gastroenterol* 2024; 30(12): 1777-1779

URL: <https://www.wjgnet.com/1007-9327/full/v30/i12/1777.htm>

DOI: <https://dx.doi.org/10.3748/wjg.v30.i12.1777>

TO THE EDITOR

The topic of hepatic recompensation, according to Baveno VII criteria, is a novel and promising topic for patients with decompensated liver cirrhosis. It was previously thought that reaching the stage of decompensation in liver cirrhosis is a point of no return. This topic opens a new hope for patients with decompensated liver cirrhosis and may improve their clinical outcome if the appropriate therapeutic measures are taken.

The Baveno VII concept of hepatic recompensation necessitates meeting the following criteria: (1) Addressing the primary cause of cirrhosis through removal, suppression, or cure; (2) Achieving resolution of ascites, encephalopathy, and ensuring the absence of recurrent variceal hemorrhage for a minimum of 12 months; and (3) Demonstrating stable improvement in liver function tests [1].

We read the interesting manuscript of Gao *et al*[2], who presented a retrospective evaluation of 64 patients who underwent transjugular intrahepatic portosystemic shunt (TIPS) for bleeding varices or refractory ascites.

It was interesting that one-third of the patient population achieved hepatic recompensation as per Baveno VII criteria.

The concept of Baveno VII is novel, and a comparison of previous studies discussing hepatic recompensation is limited by the heterogeneity of the definition of hepatic recompensation. More studies are needed to accurately define the rate of recompensation under its criteria especially with different etiologies[3]. The criteria for recompensation for chronic hepatitis B patients were validated in a multicenter prospective study[4]. Most of the previous studies focused on etiological removal, suppression, or cure before measuring recompensation. Interestingly, this study adds a therapeutic intervention for portal hypertension in addition to targeting the etiology of cirrhosis.

Baveno VII criteria put a condition of removal, suppression, or cure of the etiology of liver cirrhosis. The study mentioned that all patients received essential medication or lifestyle interventions in line with EASL guidelines to achieve the removal or suppression of the primary cause of cirrhosis. The primary disease was referred to in the study as a collective viral hepatitis, alcohol, and others. There was no mention in the study of the specific viral etiologies, whether hepatitis B virus, hepatitis C virus, or coinfections, and the nature of the other diseases. It would have increased the value of the study if those specific details had been highlighted, including the follow-up of the etiologic cause during the post-intervention year to ensure the continuous state of suppression or cure. The follow-up only included liver function tests, Child-Pugh score, and Model for End-Stage Liver Disease score for 1 year, which ensured stable improvement as per BAVENO VII criteria.

TIPS is a therapeutic intervention not aimed directly at the clearance of the etiological factor of liver cirrhosis. It has specific indications during chronic liver disease, including bridging to liver transplantation, acute variceal bleeding, and refractory ascites. It has documented complications as well, such as hemorrhage, encephalopathy, TIPS dysfunction, and liver failure[5]. To prove it carries additional benefits to achieve recompensation, it needs a controlled study where the isolated effect of TIPS is measured, but this poses an ethical challenge as mentioned in the study limitations.

Regarding the clearance of the etiologic diagnosis, the impact of therapy other than for viral and alcohol-related liver disease remains to be further studied [3]. Double-blinded studies will pose an ethical challenge, as giving no intervention to clear the etiology for decompensated cases will deprive those patients of the potential of their disease improvement.

FOOTNOTES

Author contributions: Shaaban HE, Abdellatef A, and Okasha HH, shared equally in letter writing; Okasha HH revised the letter.

Conflict-of-interest statement: The authors have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this manuscript.

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: Egypt

ORCID number: Hossam Eldin Shaaban 0000-0002-0832-5382; Abeer Abdellatef 0000-0001-9945-9767; Hussein Hassan Okasha 0000-0002-0815-1394.

S-Editor: Lin C

L-Editor: A

P-Editor: Yuan YY

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 **Reiberger T**, Hofer BS. The Baveno VII concept of cirrhosis recompensation. *Dig Liver Dis* 2023; **55**: 431-441 [PMID: [36646527](#) DOI: [10.1016/j.dld.2022.12.014](#)]
- 4 **Wang Q**, Zhao H, Deng Y, Zheng H, Xiang H, Nan Y, Hu J, Meng Q, Xu X, Fang J, Xu J, Wang X, You H, Pan CQ, Xie W, Jia J. Validation of Baveno VII criteria for recompensation in entecavir-treated patients with hepatitis B-related decompensated cirrhosis. *J Hepatol* 2022; **77**: 1564-1572 [PMID: [36038017](#) DOI: [10.1016/j.jhep.2022.07.037](#)]
- 5 **Suhocki PV**, Lungren MP, Kapoor B, Kim CY. Transjugular intrahepatic portosystemic shunt complications: prevention and management. *Semin Intervent Radiol* 2015; **32**: 123-132 [PMID: [26038620](#) DOI: [10.1055/s-0035-1549376](#)]



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>

