



Could TIPS be Applied in All Kinds of Portal Vein Thrombosis: We are not Sure!

Dear editor:

We read with interest the recent article by Chinchilla-Lopez, *et al.* regarding the role of transjugular intrahepatic portosystemic shunt (TIPS) in patients with refractory ascites and portal vein thrombosis (PVT).¹ We should applaud their work for the extend of TIPS indication in this population, since high-quality clinical trials has demonstrated that patients with refractory ascites and/or PVT could benefit from this procedure.^{2,3} However, several issues need further clarification.

A reduced portal flow velocity has shown to be an important underlying mechanism of PVT formation in patients with cirrhosis.⁴ TIPS creation could restore portal vein flow, recanalize portal venous system and relieve the complications of portal hypertension. However, the intrahepatic PVT (such as the case presented by Chinchilla-Lopez) couldn't resolve because the intrahepatic portal branch flow was further decreased after TIPS.¹ The TIPS indication in patients with intrahepatic PVT need further evaluated.

A post-TIPS portosystemic pressure gradient (PSG) below than 12 mmHg was usually considered the target threshold of *de nova* TIPS creation.⁵ It is uncommon for the authors to report pre- and post-TIPS portal pressure instead of PSG.¹ In addition, a significant low post-TIPS PSG may lead to deprivation of portal perfusion, aggravated liver function and increased incidence of hepatic encephalopathy.

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REFERENCES

1. Chinchilla-López P, Hamdan-Pérez N, Guerrero-Ixtlahuac J, Barranco-Fragoso B, Méndez-Sánchez N. The Role of TIPS in patients with Refractory Ascites and Portal Vein Thrombosis. *Ann Hepatol* 2017; 16: 619-20.
2. Bureau C, Thabut D, Oberti F, Dharancy S, Carbonell N, Bouvier A, Mathurin P, et al. Transjugular Intrahepatic Portosystemic Shunts With Covered Stents Increase Transplant-free Survival of Patients With Cirrhosis and Recurrent Ascites. *Gastroenterology* 2017; 152: 157-63.
3. Luo X, Wang Z, Tsao J, Zhou B, Zhang H, Li X. Advanced Cirrhosis Combined with Portal Vein Thrombosis: A Randomized Trial of TIPS versus Endoscopic Band Ligation Plus Propranolol for the Prevention of Recurrent Esophageal Variceal Bleeding. *Radiology* 2015; 276: 286-93.
4. Zocco MA, Di Stasio E, De Cristofaro R, Novi M, Ainora ME, Ponzi F, Riccardi L, et al. Thrombotic risk factors in patients with liver cirrhosis: correlation with MELD scoring system and portal vein thrombosis development. *J Hepatol* 2009; 51: 682-9.
5. Boyer TD, Haskal ZJ. The Role of Transjugular Intrahepatic Portosystemic Shunt (TIPS) in the Management of Portal Hypertension: update 2009. *Hepatology* 2010; 51: 306.

CONFLICTS OF INTEREST

The authors disclose no conflicts.

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Reply

We appreciate your interest and comments of our work published in *Annals of Hepatology*. It is well known that Transjugular Intrahepatic Portal Shunt (TIPS) is a good alternative for management of complications of portal hypertension. However, nowadays the management of