

TIPS experience in variceal bleeding of patients on the liver transplantation waiting list in our center

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Introduction: Gastroesophageal varices are detected in 30-70% of patients with liver cirrhosis, and one-third of them bleed. The rate of variceal rebleeding is 30-40% within 6 weeks and mortality reaches 30%. A multidisciplinary approach is required in variceal bleeding control and endoscopic treatments are essential. In the endoscopic procedure, endoscopic band ligation with or without sclerotherapy is effective in 80-90% of variceal bleeding. Transjugular intrahepatic portosystemic shunt (TIPS) is the treatment used in patients who do not respond to endoscopic treatments. This study aims to investigate efficacy of TIPS treatment in variceal bleeding at our center.

Methods: Medical records of all patients on the liver transplantation waiting list, who underwent TIPS for variceal bleeding, between 2016 -2023 were retrospectively reviewed. Demographic information, etiology of underlying liver disease, indication of TIPS, requirement of additional procedure (selective variceal embolization), and outcome of these patients were analyzed.

Results: A total of 26 patients underwent TIPS procedure due to variceal bleeding in the last 7 years. Of these patients 16 were male, 10 were female with mean age 52 years (21 to 77 years). Etiologies of underlying liver diseases were: Budd Chiari syndrome in 4 patients (15%), noncirrhotic portal hypertension in 1 patient (4%), and liver cirrhosis in 21 patients (81%). Regarding the etiology of liver cirrhosis, 8 (38%) were cryptogenic, 5 (24%) were alcoholic-related, 4 (19%) were HBV-related and the remaining had other etiologies. TIPS indications were 3 patients with fundal variceal bleeding, 1 patient with recurrent rectal variceal bleeding, and the 22 patients presented with esophageal variceal bleeding. During the TIPS procedure, 18 patients (69.2%) were needed to perform selective variceal embolization. Although bleeding control after TIPS was 100%, 2 patients (7.7%) died with the diagnosis of multiorgan failure and sepsis.

Discussion: Gastroesophageal variceal bleeding is an important cause of mortality in patients with liver cirrhosis. TIPS is a successful treatment choice in variceal bleeding that cannot be treated endoscopically. In our study, most patients were with liver cirrhosis with esophageal variceal bleeding. The majority of patients (69.2%) had simultaneous selective variceal embolization with TIPS. It may have contributed to our 100% bleeding control success. Two patients who died were both CHILD Pugh C (score 10-11) patients. Therefore, it is important to evaluate patients with advanced liver cirrhosis carefully, as the risk of other complications and mortality is still high despite successful procedures.