

ESOPHAGEAL VARICES REBLEEDING PROPHYLAXIS TREATMENT: WHO IS THE CHAMPION?

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Portal hypertension (PH) is still a big challenge in clinical practice, where the presence of esophageal varices (EV) is the most common complication found in liver cirrhosis (LC) patients. The progression of PH condition in LC patients would lead to decompensated stage with more complications, such as variceal bleeding, the presence of ascites, hepatic encephalopathy, and hepatorenal syndrome.[1,2] Bleeding of EV (BEV) is a critical clinical which carry high mortality. Therefore, not only early detection and how the PH condition can be diagnosed well, but also how we can manage to prevent its complication, especially for primary as well as secondary BEV prophylaxis.[3]

SCREENING ESOPHAGEAL VARICES AND ACUTE VARICEAL BLEEDING

Esophagogastroduodenoscopy (EGD) is the standard tool to screen and diagnose the presence of EV, as well as isolated gastric varices (GV). Based on Asian Pacific Association for The Study of The Liver (APASL) guideline, it has been recommended that all newly diagnosed LC patients should undergo EGD screening for the presence of varices. In patients with acute variceal bleeding (AVB), EGD should be performed within 12-24 hours. It is well-known that AVB most likely will be present when the portal pressure reaches more than 12 mmHg.[4] The high-risk stigmata, such as cherry red spot, and hematocystic spot are also very important in the endoscopic management. Endoscopic band ligation (EBL), and cyanoacrylate injection (CYI) are the standard of care in daily practice for managing variceal bleeding. However, in the real clinical setting, these methods are not always successful to control the bleeding. The severity of liver disease

when measured by the common scoring system, such as Child Pugh (CP) score, and the high portal pressure itself which is usually diagnosed through hepatic vein gradient pressure (HVPG) measurement are the two important parameters in bleeding prevention.[5]

STRATEGY MANAGEMENT IN ACUTE VARICEAL BLEEDING PREVENTION

Based on APASL guideline, and European Association for The Study of The Liver (EASL) guideline, it has been stated that in the setting of AVB, combination of vasoactive drugs and EBL should be the first-line approach. The use of vasoactive drugs has shown to be an effective treatment to control the bleeding.[4,6] In the secondary prevention of AVB, the use of beta blocker has been well-studied. Studies have shown that beta blocker can be effectively reduce the portal pressure, however, the patient's tolerability can become a treatment challenge in the real clinical setting. [7] Recently, the use of carvedilol has been showed to be superior to the old beta blocker, propranolol.[8] It is also can be used to delay the variceal growth. In fact, the use of carvedilol has been showed to be superior also to EBL procedure for re-bleeding prevention.[9] However, several major concerns, such as hypotension, water and sodium retention, and progressive ascites have been encountered in clinical practice.[10]

THE ROLE OF TRANSJUGULAR INTRAHEPATIC PORTOSYSTEMIC SHUNT (TIPSS) IN AVB PREVENTION

Transjugular intrahepatic portosystemic shunt (TIPSS) has been introduced many years ago, and it is a salvage treatment for patients with refractory AVB.

In the setting of AVB, TIPSS has been showed to be an effective method to control the bleeding.[11] In the long term of period, TIPSS has shown to decrease the mortality rate, however the risk of HE has been a major issue. There has been a debate about patient's selection, and its impact to cardiac condition.[12,13] In the setting of acute on chronic liver failure (ACLF), pre-emptive TIPSS has been effectively not only to decrease the rebleeding rate, but also significantly lowering the mortality.[14]

CONCLUSIONS

Variceal bleeding prevention is a challenging clinical condition, which needs a good comprehensive evaluation before deciding which is the best treatment strategy not only to prevent rebleeding, but also to prolong the survival. TIPSS is very effective for bleeding control, rebleeding prevention, and decreasing mortality rate in LC patients, however, the patient's selection would be the most important parameter.

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