Transjugular Intrahepatic Portosystemic Shunt (TIPS) Creation to Improve Surgical Candidacy Prior to Abdominal Operation: A Retrospective Analysis

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Background and Hypothesis: TIPS creation is typically reserved for patients with refractory ascites or variceal hemorrhage. While TIPS have also been created prior to planned abdominal operation to decrease morbidity related to portal hypertension, there is little in the literature supporting its efficacy in that indication. The goal of this study was to determine if preoperative TIPS creation allows successful abdominal operation and improves outcomes.

Experimental Design or Project Methods: A retrospective review of records of 22 patients who underwent preoperative TIPS creation between 2011 and 2016 was performed. Clinical and serologic data were obtained for 21 patients since one patient was completely lost to follow up after TIPS creation. The primary endpoint was whether patients underwent planned abdominal operation following TIPS. Operative outcomes and reasons that patients failed to undergo planned operation were examined as secondary endpoints.

Results: The mean age was 56.4 ± 8.8 years, and the mean Child-Pugh and Model for End-Stage Liver Disease (MELD) scores were 7.2 ± 1.5 and 11.9 ± 4.3 , respectively. Thirty-day mortality after TIPS creation was 9.5%. Eleven patients (52.4%) underwent planned abdominal operation and the thirty-day mortality rate was 0%. One of these 11 patients (9.1%) had surgical wound dehiscence and infection 53 days after operation. Reasons for failure to proceed to abdominal operation after TIPS were multifactorial.

Conclusion and Potential Impact: In our population, TIPS allowed successful abdominal operation in the majority of patients, with thirty-day TIPS mortality of 9.5%, no perioperative mortality, and 9.1% major postoperative morbidity.