

Summary

Transjugular intrahepatic portosystemic shunt (TIPS) as side to side portosystemic anastomosis is now well established in the treatment of the main complications of portal hypertension such as variceal bleeding or refractory ascites.

Aims : To examine the outcome of the TIPS for the treatment of refractory ascites in patients with symptomatic portal hypertension in retrospective study. To analyze pre-TIPS laboratory, history data, and in the subgroup of the patients invasively measured parameters of pulmonary and systemic circulation to determine mortality risk factors. To compare mortality predictive power of two scoring systems (Child Pugh and MELD score).

Methods: From January 1999 to December 2003 TIPS procedure for RA was performed in 110 patients (mean age 54,7, 75% of men). According to Child Pugh classification the patients were divided (41% in C class) and MELD score was calculated (mean value 16). The clinical findings, response to treatment, complication and survival of the patients were analyzed. Pre-procedure laboratory, history and hemodynamic data were analysed by Cox regression and predictive power of MELD and Child Pugh score by ROC(AUC) analysis was done.

Results : TIPS was placed in 99% successfully. No mortality due to procedure was noted. Portosystemic gradient was reduced by 60% on average. The mean follow up period was 23 months. In 94% of the patients the treatment response was seen. Only in 4% of the patients no effect was seen and in 2% of the patients the effect was only temporary. In 23% of the patients for recurrence of ascites the PTA revision of the shunt was done successfully in the follow up period. New or worsening encephalopathy was in 39% of patients, but only in 19% was severe. 30 day mortality was 10,9%. Three and twelve month survival was 64% and 54%. During the whole follow up period 73,6% of the patients died. Analyzing laboratory data, serum creatinin was found as the strongest predictor of mortality. From history data the presence of JE and female gender was associated with the worse prognosis. From invasively measured parameters of pulmonary and systemic circulation, only high pulmonary vascular resistance was associated with a slightly worse prognosis. When comparing mortality predictive power of MELD and Child Pugh score, only MELD score had sufficient predictive power for one and tree month mortality (AUC 0,73 and 0,73 vs 0,62 and 0,67). For twelve months, the predictive power was low for both scoring systems.

Conclusion : Transjugular intrahepatic portosystemic shunt is effective in the indicated cases in the treatment of the refractory ascites caused by portal hypertension. Technically, it is feasible. Hepatic encefalopathy is the most common complication after the procedure. Serum creatinin was found as the strongest predictor of mortality. Patients with associated pulmonary hypertension have worse prognosis too. MELD score is superior to Child Pugh classification in prediction of early mortality.