

Portocaval Shunt in Liver Transplantation, Why not?

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Letter to Editor

The benefits of Portocaval Shunt (PCS) during Liver Transplantation (LT) have been described by several authors. PCS allows reducing splanchnic venous congestion, intestinal edema with the consequent bacterial translocation, and improves hemodynamic stability during liver transplantation. In a meta-analysis published in 2018 [1], which analyzes 10 studies with a total of 1,377 patients who underwent PCS during LT, it was reported a decrease in both: Hospital and Care unit length of stay, as well as a decrease in mortality rates.

We have published our encouraging results on the protective role of portocaval shunt in liver transplantation [2]. PCS was found to play a protective role when analyzing the one-year mortality rate after the liver transplantation, reducing the probability of death by 70%. In addition, patients with PCS presented a lower rate of reperfusion syndrome (26.5% vs. 29.43%, respectively) and a decrease in transfusion requirements during surgery (4.39% vs. 5.8%, respectively). One-year mortality was 14.8% and the main cause of death was infection (38.2%). However, our study suffered from an important bias: it was a retrospective and not randomized one. Nevertheless, Figura et al. [3] published a prospective and randomized study on the usefulness of PCS during LT reporting coinciding results with ours. They describe a better hemodynamic control, less need for intraoperative transfusions and postoperative renal dysfunction in the group of patients in which the PCS was carried out. This last benefit was also present in the univariate analysis of our study, but not in the multivariate final analysis.

We believe that there is sufficient scientific evidence on technical and patient advantages when performing PCS in liver transplantation.

So, if this additional surgical technique can improve survival rates, why do not apply it in all patients? One of the technical arguments for avoiding that is the fact that this type of technique can reduce the length of the portal vein, promoting some kind of difficulty for portal vein reconstruction, requiring technical modifications [4]. That was not our experience.

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