



A commentary on ‘Portal vein thrombosis and liver transplantation: management, matching, and outcomes: a retrospective multicenter cohort study’

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To the Editor,

I was intrigued by the recent publication of the research paper ‘Portal vein thrombosis and liver transplantation: management, matching, and outcomes: a retrospective multicenter cohort study’ in the *International Journal of Surgery*^[1]. This retrospective multicenter cohort study proposes measures to reduce the incidence of adverse events after liver transplantation (LT) in patients with portal vein thrombosis (PVT), adequately balancing liver function and the type of inflow reconstruction. A study by Fabrizio Di Benedetto *et al.* showed that even in patients with grades 3–4 PVT, the prognosis of patients with risk factors that can be effectively controlled will be significantly improved. This is significant in the context of LT, both in terms of helping to improve the prognosis of patients with PVT and ensuring better donor–recipient matching and safer organ allocation. The results of the study are both significant and timely. The researchers’ rigorous efforts and valuable contributions are deeply appreciated. However, some constructive suggestions for further refinement are proposed.

First, the study was a multicenter study, with cases collected by 26 surgeons from different institutions. Compared with single-center studies, multicenter studies are generally richer in data, which can significantly improve the efficiency of the study and increase the representativeness and generalization of the results, which is worthwhile for researchers to consider. However, it is important to note that the surgeons involved in the study were from different medical teams and used different treatment protocols for LT patients with varying medical conditions. These

variances may affect patient prognosis, thereby influencing research outcomes. Improving communication and harmonizing perioperative management and treatment specifications among multicenter treatment teams can effectively solve the problem^[2].

Second, as the authors state, the study was conducted over a lengthy period, from January 2000 to February 2020. This extended timescale increases the risk of missing data or incomplete information. This could affect the accuracy and reliability of the findings, as some data may be unavailable or unreliable. At the same time, over a longer period of time, there may involve multiple data collection stages and various methods of data recording. This diversity and change can lead to inconsistency in data quality, which may subsequently introduce errors and biases. Furthermore, changes in other factors over time, such as advancements in medical techniques or equipment, alterations in treatment guidelines, and shifts in population characteristics, may also impact the generalization and applicability of study outcomes and increase the complexity of understanding and inferring causality.

Finally, this retrospective study, based on actual Italian medical records, is commendable for its close link to clinical reality and reflection of the patient population’s most realistic situation. Consideration should be given to using concurrent prospective studies as a means to validate the results of retrospective studies. Prospective studies are free from participant recall at the time of data collection, reducing memory bias and mitigating information and selection bias, thus enhancing data accuracy and reliability^[3].

In conclusion, the study by Fabrizio Di Benedetto *et al.* is of great significance to improve the benefit of patients with PVT in LT. The generally poor prognosis of patients with PVT underscores the importance, necessity, and even urgency of in-depth studies in this area^[4], which could pave the way for a better selection of treatment options for LT. Our suggestions are merely aimed at further enhancing an already outstanding research achievement. We eagerly anticipate the authors producing even more innovative works in the future.

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This manuscript is a comment. Don't need a data availability statement. However, all the data from the current study are publicly available.

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