

“Letter to the Editor: Emergency surgical treatment of total anomalous pulmonary venous connection”

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“Letter to the Editor: Emergency surgical treatment of total anomalous pulmonary venous connection”

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Letter:

To the Editor,

We meticulously read your article titled “Emergency surgical treatment of total anomalous pulmonary venous connection” by Yongtao Wu MD et al¹ and we sincerely congratulate the authors for their appreciable efforts.

As substantiated by diverse research on the impact of emergency surgery in patients with total anomalous pulmonary venous connection (TAPVC),² we agree with the conclusion of the study that emergency surgery achieves beneficial short term results in TAPVC patients. However, we consider it essential to mention

additional noteworthy points that would enhance the quality of this article and add to existing knowledge of this crucial surgical procedure.

Firstly, we observed that key baseline characteristics and variables were missing from the study. A recent retrospective study analyzing the impact of emergency surgery without stabilization on TAPVC included gestational age and preoperative indicators such as preoperative lowest pH, highest plasma lactate, aspartate aminotransferase, peak creatinine, and peak urea.² Additionally, in another study,³ patients were characterized on the basis of their presentation in the emergency ward, their ventilation status and prior administration of inotropic agents. We believe including these characteristics would have further allowed the authors of the original study to better stratify patients and predict the impact of emergency surgery on them.

Secondly, the authors mentioned several common post-operative complications of this emergency procedure, yet missed some complications such as hospital acquired infections, low cardiac output & diaphragmatic paralysis.² An assessment of these complications would have further increased the validity of the original study.

Thirdly, a 2021 retrospective study indicated sutureless technology as an alternate treatment option for TAPVC. Sutureless technology improved surgical outcomes for patients with infracardiac TAPVC, preoperative pulmonary venous obstruction, low body weight, or complicated anatomy.⁴ These observations are consistent with previous studies establishing that sutureless technology is more suitable for high-risk patients with obstructive, infracardiac or mixed TAPVC.⁴ The authors should have explored promising effects of such technology making it a potential therapeutic application for TAPVC.

Fourthly, the authors failed to assess central venous pressure (CVP) which is a crucial risk factor for post-operative death in TAPVC patients undergoing surgical treatment.⁴ In a previous study, the patients were divided into three equal cohorts according to postoperative CVP and it was found that when postoperative CVP was greater than 8 mmHg, early and overall mortality increased significantly.⁴ This is consistent with findings observed in previous studies.⁴ Finally, polycentric approaches should be adopted to enhance early diagnosis and appropriate treatment as well as ingenious therapies explored to yield alternate treatment options.

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CRediT author statement (author contribution):

Dr Muhammad Sohaib: conceptualization, data curation, methodology, software, writing – original draft preparation.

Dr Arsalan Nadeem: supervision, software, writing – reviewing and editing.

Disclaimer:

None to declare.

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None.

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