See Article page 2036.

Commentary: Being at the table, not on the menu: Surgeon-initiated call for better risk stratification of pediatric heart transplant recipients

Mohamed F. Algahim, MD

Mohamed F. Algahim, MD, Assistant Professor of Surgery

CENTRAL MESSAGE

It is important for surgeons to bring forward concerns and be part of a dialogue to address perceived limitations in the current risk-stratification model for pediatric heart transplant recipients.

Perhaps no field in surgery is more self-critical and independently scrutinized than that of cardiac surgery. Cardiac surgeons perform lifesaving operations with potentially life-ending complications. Proper risk stratification and analysis of outcome metrics are necessary to advance the field and to better inform ourselves and the public of the risks, benefits, and alternatives of the operations we perform. This requires capture of the preoperative, intraoperative, and postoperative variables that impact outcomes. For validation and proper interpretation, data must be adequately powered by tracking outcomes of large patient populations over many years.

This has proved challenging in the pediatric cardiac surgery arena, particularly in the transplant population. In this issue of the *Journal*, Woods and colleagues¹ share their expert opinion on the need for better risk modeling by the United Network for Organ Sharing (UNOS) and the Scientific Registry of Transplant Recipients. They describe the discrepancy in outcomes between children undergoing cardiac transplantation for dilated cardiomyopathy and those requiring transplantation for congenital heart disease, with dilated cardiomyopathy patients having a lower risk profile and better outcomes. The current risk model bridges

the outcomes from the past surgical era with the contemporary era, as programs have become more aggressive in performing transplantation in more complex and ill children, especially those with single-ventricle physiology.² On this point alone, the authors make a valid argument for the need to update the current model to properly reflect this subset of complex patients. Additionally, the authors highlight the implications of the outcomes on transplant programs, including flagging by the UNOS, center designation, payer standing, and the impact on program aggressiveness, patient selection, and organ allocation. They cite the views of 25 major transplant programs wherein most thought the current model needs adjustment to better reflect the differing risks between these 2 populations. In an effort to initiate a dialogue on the topic, Woods and colleagues¹ make the following proposition: “The SRTR retain the current data set and risk adjust and report only for patients with DCM; or add more data elements to the data set to allow for better risk adjustment of the more complex (CHD) patients.”

The authors are all surgeons and privy to the acute and long-term surgical challenges of managing these patients. As such, their opinion and that of others directly involved in patient care are essential to any dialogue with the

From the Pediatric Cardiothoracic Surgery, Department of Surgery, University of Rochester School of Medicine and Dentistry, Rochester, NY.

Disclosures: The author reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Received for publication Jan 5, 2022; revisions received Jan 5, 2022; accepted for publication Jan 6, 2022; available ahead of print Jan 11, 2022.

Address for reprints: Mohamed F. Algahim, MD, Division of Cardiac Surgery, Department of Surgery, University of Rochester School of Medicine and Dentistry, 601 Elmwood Ave, Box Surg/Cardiac, Rochester, NY 14642 (E-mail: mohamed_algahim@urmc.rochester.edu).

J Thorac Cardiovasc Surg 2022;164:2040-1

0022-5223/\$36.00

Copyright © 2022 by The American Association for Thoracic Surgery

<https://doi.org/10.1016/j.jtcvs.2022.01.012>

UNOS and Scientific Registry of Transplant Recipients to address the limitations of the current model. However, risk stratification of these patients will be challenging because it often seems that the transplant is the only common denominator among these patients. This is a small heterogeneous population in a surgical field that continues to evolve, especially in the area of mechanical support. Nonetheless, recognizing the issues and initiating a dialogue solve 50% of the problem.

I commend the authors for their effort to initiate and be part of this important dialogue, and look forward to an ongoing discussion of this topic.

References

1. Woods RK, Kirklin JK, Maeda K, Adachi I, the associated authors of the Pediatric Cardiac Transplant Risk Adjustment Group. We need better pediatric cardiac transplantation risk modeling. *J Thorac Cardiovasc Surg.* 2022;164:2036-9.e1.
2. Dipchand AI. Current state of pediatric cardiac transplantation. *Ann Cardiothorac Surg.* 2018;1:31.