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.



REPLY: "EARLY" HAS A DEFINITION AND AGE MATTERS BUT PROGRAM ATTRIBUTES MATTER MORE Reply to the Editor:



leagues'² report of long-term outcomes after complete repair of complete atrioventricular septal defect (CAVSD) are important for readers to hear and be clear about. The message of these outstanding results should not be interpreted as an endorsement of a therapeutic strategy that eliminates age as a factor in timing of CAVSD repair. To walk away from a reading of the Swedish experience with this lesion with that conclusion would be at best, in the words of our colleagues, naïve. Some might (rightly) suggest another word: Reckless.

To reiterate, there are clinical scenarios wherein the authors themselves used interim palliation rather than primary complete repair (a neonate with necrotizing enterocolitis, for instance). What's more, the data and analytic methodology (a binary approach to assessment of the influence of age, a continuous variable) employed by Johannson Ramgren and colleagues² do not and cannot shed light on the feasibility or advisability of elective neonatal primary repair of CASVD because there are only 3 neonates in the series! It would, or course, be preposterous to assert that elective neonatal repair of CAVSD could ever carry the same hazard function as the same scenario in a 6-month-old child. So it is entirely appropriate to sound a cautionary note to anyone who may read this experience as a platform for a policy of elective repair of CASVD that is devoid of consideration of age.

Johansson Ramgren and colleagues² use the term *early repair* to describe a patient population that is somewhere

beyond the neonatal period but younger than the commonly described optimal age for primary repair (age 4 months to as late as 8 months, depending on institutional practice pattern). Many centers would choose to palliate such patients if they required surgical intervention for clinical reasons. This series provides quite convincing evidence that optimal outcomes can be achieved using primary repair in the vast majority of that particular cohort, eschewing pulmonary artery banding.

The most influential takeaway from Johansson Ramgren and colleagues'² report goes well beyond the age-at-repair question. What should capture readers' attention is how these admirable outcomes were achieved: A uniform approach and policy that was supported and adhered to by all members of the team, programmatic stability characterized by consistent and progressively experienced surgical personnel, and regionalization of care, which more than doubled the volume of cases and, accordingly, the experience of the care teams.³

We all aspire to achieve the best outcomes possible for all of our patients, no the matter the challenges. When it comes to CAVSD, the Swedish experience provides a compelling blueprint for the rest of us to follow.

> David M. Overman, MD Division of Cardiovascular Surgery Children's Minnesota Minneapolis, Minn Division of Cardiac Surgery The Children's Heart Clinic Mayo Clinic–Children's Minnesota Cardiovascular Collaborative Minneapolis, Minn

References

- Miller J, Nath P, Eghtedsady P. A word of caution regarding early repair of complete atrioventricular septal defect: don't let the pendulum swing too far. *J Thorac Cardiovasc Surg Open*. 2022;9:246.
- Johansson Ramgren J, Nozohoor S, Zindovic I, Gustafsson R, Hakacova N, Sjogren J. Long-term outcome after early repair of complete atrioventricular septal defect in young infants. *J Thorac Cardiovasc Surg.* 2021;161:2145-53.
- 3. Overman DM. Commentary: repair of complete atrioventricular septal defect: the bar has been set. *J Thorac Cardiovasc Surg.* 2021;161:2154-5.

https://doi.org/10.1016/j.xjon.2021.11.010

Copyright © 2021 The Author(s). Published by Elsevier Inc. on behalf of The American Association for Thoracic Surgery. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).