For young children with favorable anatomy, the authors, like others, advocate for anatomic repair whenever feasible. However, they are reluctant to offer a universal recommendation for anatomic repair. Instead, they advise this strategy for patients with good biventricular and atrioventricular valve function. Although anatomic repair has become a favored choice, and the supporting rationale is sensible, intuitive, and backed by accumulating experience, there remains some room for equipoise. As this study shows, there was no clear winner among the multiple treatment pathways for this complex and heterogeneous disease.

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CONG

Commentary: Incomplete data and inertia: Neither silences the tolling bell of corrected transposition

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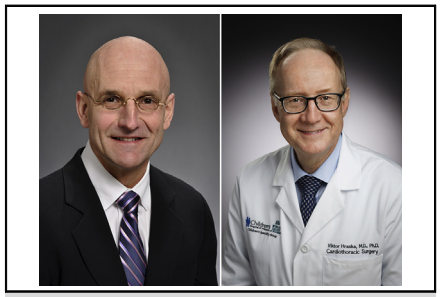

Ronald K. Woods, MD, PhD, and Viktor Hraska, MD, PhD

CENTRAL MESSAGE

The Cleveland Clinic's report on corrected transposition offers very interesting reading but lacks convincing data to provide new insight into optimal management strategies.

Barrios and colleagues have taken on a truly massive effort with the ultimate goal of improving our understanding of the long-term outcomes associated with various treatment strategies for corrected transposition of the great arteries (cTGA). They have capitalized on both statistical expertise and a large cohort spanning the interval from 1995 to 2000. We applaud them for their effort and hard work and also express our respect and gratitude to Dr Roger Mee.

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As stated in the accompanying video, teasing new insights from a cohort 20 years back poses challenges. The survival data add to the existing knowledge but do not convincingly demonstrate a long-term survival advantage with anatomic repair. Although it is interesting that 40 patients age 35 years demonstrated a nearly 90% 20-year survival with no surgery, the missing denominator and inherent selection bias prevent the authors from drawing conclusions. In our opinion, the authors appropriately refrained from claiming superiority of the Fontan approach. Nearly two-thirds of the Fontan recipients were true single-ventricle patients; it is not clear why these patients would even be included in the analysis. The authors potentially could have gleaned an important message had echocardiographic follow-up been more complete. Unfortunately, the median duration of follow-up was only 9 days, and only 40% of patients had data available at 4 years. Based on the available data, anatomic repair did not uniformly result in long-term preservation of morphological left ventricular function; however, the reader should view any related conclusions with cautious skepticism.

Nevertheless, this remains a very good descriptive report of a large cohort encompassing the heterogeneity of cTGA and its management. We agree with what we perceive to be the authors' intended message[1]: the morphologic left ventricle, by nature's design, should support the systemic circulation; (2) with certain exceptions, establishing this arrangement early in life will provide the best long-term results; and (3) attrition of a systemic morphologic right ventricle will occur in the majority of patients at some point, but predicting upfront exactly in whom and when the first subtle signs of dysfunction (muscle or valve) will appear is virtually impossible. We emphasize the latter point because, according to human nature, we tend to experience less inertia as the consequences of current inaction become more acute. Specifically, if the right ventricle failed in all patients by age 2 years, most of those in our specialty would be engaged in a highly concerted, collaborative effort focusing on patient selection and refining and optimizing anatomic repair (and any preceding preparation) and long-term results. At a minimum, we would be maintaining an international registry of data required to address these issues.

In first doing no harm, we must acknowledge that acts of commission and omission, and any related harm, apply to the entire lives of current and future patients. Consider dTGA and the history of the arterial switch. Doing what should be best for the long-term health of the patient enabled dogged persistence. For cTGA, like it or not, heard or not, the bell still tolls for the systemic morphologic right ventricle.

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