
To the Editor:

We read with interest the article by Fixler et al on mortality risk in infants with severe congenital heart disease.1 In an era when experienced centers report surgical mortality rates of <10% for the Norwood procedure, a 5-year survival of 38% in their population-based study for hypoplastic left heart syndrome remains poor.

The highest mortality risk in hypoplastic left heart syndrome occurs prior to stage 2 palliation and can be stratified into presurgical, surgical, and interstage (postdischarge) mortality. Reducing presurgical mortality requires improving access to the best healthcare resources. This point is highlighted by the fact that neonates born in “border counties” farthest from major centers were at increased risk. Furthermore there was significant ethnic disparity in outcomes, some of which may be a direct result of decreased access. We have previously shown that blacks are more likely to undergo stages 2 and 3 palliation at an older age, perhaps because of unfavorable access to healthcare resources.2

Surgical mortality represents the second opportunity for improvement. High-volume centers strive for mortality rates <15%, and the best centers currently report mortality rates of 5% to 10%.3 Low-volume centers have consistently demonstrated higher mortality rates.4 The authors do not address the possibility that centers lacking the required infrastructure might have significantly compromised overall survival rates. Many argue that the complexity of the Norwood procedure dictates that surgical intervention be reserved for regional referral centers with the required resources to support comprehensive surgical and postoperative care.

An additional 10% to 15% of mortality occurs during the interstage period.3 The fragile Norwood physiology is the likely culprit. Dramatic improvements in interstage mortality have been shown with the implementation of relatively simple but vigilant home monitoring programs.5 These programs’ success illustrates the importance of close, continued monitoring of these vulnerable infants.

This study illustrates that, although huge strides have been made, much work needs to be done. If we hope to see improvement in mortality in the next decade that parallels what has been seen in the preceding 2 decades, we need to promote quality surgical outcomes and improved access to the finest healthcare resources, as well as a vigilant approach to postdischarge care.

Disclosures

None.

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References

Letter by Hill et al Regarding Article, "Mortality in First 5 Years in Infants With Functional Single Ventricle Born in Texas, 1996 to 2003"
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