Re: Results of orthotopic heart transplantation for failed palliation of hypoplastic left heart

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The article by Murtuza et al. [1] from the Great Ormond Street group represents the rare retrospective study that actually informs the field in a meaningful way. It focuses on the role of heart transplantation in patients already palliated for hypoplastic left heart syndrome (HLHS). Sixteen HLHS patients in various stages of palliation (most after Glenn) were compared with 154 patients transplanted for cardiomyopathies (CM) during the same time period (2000–11). Survival, intensive care unit length of stay, rates of right ventricular failure and of mechanical support were similar between both groups. Since doing a heart transplant in a previously palliated child is obviously much more challenging technically (significantly longer bypass times, pulmonary artery patch plasties, presence of collaterals, etc.) than doing one in a child with CM, the first conclusion that can be drawn (one not entertained by the authors) is that the technical/surgical risk factor has been neutralized in the current era.

The statement that post-transplant survival is the same for palliated single ventricle patients and for CM patients has important for clinical implications. A donated heart is a precious commodity and should be allocated with great care. The timing of the intellectual switch from ‘palliation mode’ to ‘pre-transplant mode’ in any given patient will be influenced by such a statement and comes with significant clinical consequences, such as how to counsel families or how aggressive to be with residual lesions.

However, it is important to note that only 4 of 16 patients in this series had had a Fontan. This makes it more difficult to compare the present series with most other series, which have mostly been about post-Fontan transplantation [2]. The post-Fontan patient has a different risk profile from the post-Glenn patient. That risk profile is more related to the incidence of liver fibrosis and renal dysfunction that occur in so many ‘failed’ Fontan patients. This in turn has implications for when to ‘pull the trigger’ and engage in a transplantation strategy. It may be that earlier is better.

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REFERENCES
