VARIATION IN PRE- AND INTRA-OPERATIVE CARE FOR FIRST STAGE PALLIATION FOR SINGLE VENTRICLE HEART DISEASE: REPORT FROM THE NATIONAL QUALITY IMPROVEMENT COLLABORATIVE

ACC Poster Contributions
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Background: As the first multi-center quality improvement collaborative in pediatric cardiology, the NPC-QIC national registry collects data on the clinical care of infants discharged home after first stage palliation of single ventricle heart disease (SVHD), the Norwood operation and variants. We sought to describe the pre- and intra-operative characteristics of the first 100 patients enrolled.

Results: From 21 contributing centers, 59% were male, median birth wt 3.1 kg, and the majority had hypoplastic left heart syndrome (64%). Prenatal diagnosis was made in 75%. Chromosomal anomalies occurred in 8%, and major non-cardiac organ system anomalies in 9%. Pre-operative risk factors were common (57%).

Choice of initial palliation varied substantially, with 50% of sites performing Stage I with right ventricle to pulmonary artery conduit as the preferred operation; 89% of hybrid procedures were performed at a single center. Significant intra-operative variation by site was also noted for those who had traditional surgical Stage I palliation, particularly with use of regional perfusion and depth of hypothermia (Figure).

Conclusions: There is substantial variation across centers in the successful initial palliation of SVHD, particularly with regard to choice of palliation and intra-operative techniques including use of regional perfusion. Further exploration of the relationship of such variables to outcomes after hospital discharge may help reduce variability and improve long-term outcomes.