

Aortic Arch re-intervention in patients undergoing aortic arch augmentation: use of a tailored pericardial patch.

Aortic arch re-obstruction is a significant complication following procedures involving aortic arch augmentation. Patients undergoing state I palliation or primary aortic arch repair have been known to develop obstruction post operatively, thereby increasing post-operative morbidity and mortality.

This study will help assess the challenges and successes of using a tailored pericardial patch for aortic arch augmentation during the Norwood procedure and primary aortic arch repairs. Additionally, we will evaluate health-related quality of life and the external factors that impact treatment decision-making. Evaluating and identifying potential predictors of outcome for our patients will inform future clinical protocol development, treatment and management that could potentially improve patient outcomes.

- Specific Aim 1:** Determine institutional historical outcomes related to the diagnosis, treatment and management of congenital heart disease and comparative analysis to national data.
- Specific Aim 2:** Determine patient characteristics and clinical predictors of short and long term outcomes related to congenital heart disease
- Specific Aim 3:** Compare patient outcomes between those who undergo repair by catheterization and those who undergo surgical repair.