

Outcomes of Interventions for Congenital Heart Defects in Patients with Trisomy 18: A Single Institution Review.

Abstract

Background and Objective: Trisomy 18 is a genetic condition with multiple congenital anomalies and extremely poor outcomes. The procedural management of cardiac disease in these patients has not been well studied. The objective of this study was to examine the outcomes of patients with trisomy 18 who underwent surgical management or cardiac catheterization for repair or palliation of congenital heart disease.

Methods: This is a retrospective chart review of a single institution's experience from 2012-2014. The study looked at 10 patients and 11 procedures. The outcomes analyzed postoperative morbidity and mortality as well as comparing pre intervention and discharge factors (oxygen use, cardiac medications, and feeding regimens). Descriptive statistics were used to analyze data.

Results: 82% of the patients survived to be discharged home, with 100% of those discharged surviving to 90 days. Average length of hospital stay was 23.8 days. At the time of discharge, 33% of patients were able to come off their home oxygen. 55% of patients had improvements in heart failure medications.

Conclusions: Despite the poor prognosis of this genetic condition, more patients are undergoing cardiac repair of their heart defects. This single institutional review shows that patients with trisomy 18 can survive the repair of congenital heart defects without significant morbidity and with improvements in the medical care they receive at home.