



Congenital Heart Disease

CONGENITAL HEART SURGERY IN PATIENTS WITH TRISOMY 13 ASSOCIATED WITH LOWER IN-HOSPITAL MORTALITY

Poster Contributions

Poster Hall, Hall C

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Background: Congenital heart disease (CHD) occurs in about 80% of patients with Trisomy 13 (T13), but surgical repair has not been offered to these patients in most centers because of low median survival. Data on congenital heart surgery (CHS) for T13 are lacking.

Methods: Nationally distributed data from 44 pediatric hospitals in the 2004 to 2015 Pediatric Health Information System (PHIS) database were used to identify patients with hospital admissions with an International Classification of Diseases-9th Revision code for T13 and CHD. Data were restricted to newborns admitted < 14 days of age. In-hospital mortality, length of stay (LOS) and adjusted total costs were compared between infants undergoing CHS and those treated medically.

Results: Of 644 infants with T13 identified, 471 had CHD (73%). Median age at admission was <1 day (IQR: 0, 1). CHS was performed in 39/471 (8% with CHD). Median LOS for the CHS group was 30 days (19, 68) versus 8 days (4, 19) in the non-surgical group ($p<0.001$). Mortality was 49% lower in the CHS group (28% versus 55%, $p<0.001$). Median hospital cost was 302% higher in the CHS group (\$133,858 versus \$33,299, $p<0.001$).

Conclusions: In-hospital mortality occurs in greater than half of neonates with T13 by less than one week of age. CHS in these patients is associated with decreased in-hospital mortality. Hospital costs are significantly increased in those who underwent CHS largely due to increased hospital LOS.