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**EFFECT OF CONGENITAL HEART DISEASE ON MORTALITY IN INFANTS WITH TRACHEOESOPHAGEAL FISTULA**

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**Introduction:** Tracheoesophageal fistula (TEF) and esophageal atresia (EA) are congenital anomalies that frequently require surgical intervention soon after birth. Infants with TEF or EA often have other congenital malformations, including congenital heart disease (CHD). In this study, we examined the effect of CHD on morbidity and mortality in infants with TEF/EA. Patients who required prostaglandin E1 (PGE1) for maintenance of a patent ductus arteriosus were also examined as a separate subgroup.

**Methods:** The computerized surgery registry of patients undergoing repair of TEF/EA at Texas Children's Hospital between January 1998 and April 2003 was examined. A total of 53 patients (M:F = 26:27) were identified and subgrouped, according to their preoperative echocardiographic data, into those with and without CHD. In the group with CHD, a subgroup was created of patients with ductal-dependent CHD requiring PGE1 infusion. Mortality (survival to hospital discharge) of the groups (CHD vs. no CHD; PGE1 dependent CHD vs. non-PGE1 dependent CHD) were compared using Fisher's Exact Test, with P < 0.05 considered significant.

**Results:** Conclusion: Mortality is significantly increased in infants with TEF and CHD when compared to infants without CHD. In the subgroup of patients with CHD who had ductal-dependent heart disease requiring PGE1 infusion, mortality was significantly increased compared to patients with non ductal dependent CHD.

**References:**

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2. Buker RH, Cox WA, Pauling FW et al. Complications of Congenital Tracheoesophageal Fistula *Am J Surg* 1972;124:705-10.
3. Spitz L. Esophageal atresia and tracheoesophageal fistula in children. *Curr Opin Pediatr* 1993;3:347-52.

Tracheoesophageal Fistula Patients with Congenital Heart Disease			
	Survivors	Non-survivors	Total Patients
Non-PGE dependent CHD	17	1	18
PGE dependent CHD	2	5*	7

PGE=prostaglandin E, CHD=congenital heart disease. \*p=.002.

Tracheoesophageal Fistula Patients			
	Survivors	Non-survivors	Total Patients
No CHD	28	0	28
CHD	19	6*	25

CHD=congenital heart disease. \*p=.008