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Lung Function Abnormalities Following Repaired Esophageal Atresia and Tracheoesophageal Fistula

Hanaa Banjar, MD, FRCPC*

Introduction: **Esophageal atresia and tracheo-esophageal fistula (EA/TEF) is common in the neonatal period and survival depends on the severity of the associated anomalies, prematurity and pre-morbid factors.**

Objective: This study represents the experience of a tertiary care center in Saudi Arabia of pulmonary function test abnormalities (PFT) after repair of (EA/TEF) including long-term effect on the lungs.

Methods: A retrospective review of all patients referred to pulmonary clinic with EA/TEF and or Pre-operative evaluations from the period 1993-2004.

Results: A total of 41 patients. Twenty-six (63%) males and 15 (37%) females. EA/TEF was diagnosed at birth in 34 (83%). EA and distal TEF were found in 37 (90%) of the patients. Congenital anomalies were associated in 28 (68%). More than 1/3 of the patients had postoperative complications including pneumothorax, recurrent TEF, leakage at operation site and empyema. More than two-third of the patients required prolonged ventilation. Pulmonary complications developed in > 70% of the patients including persistent atelectasis, chronic aspiration pneumonia, tracheomalacia in 12 (29%) and bronchiectasis in 7 (17%). Eighty-eight percent of patients who were able to do PFT showed abnormal values of moderate obstructive and restrictive lung disease.

Conclusion: (EA/TEF) form significant PFT abnormalities and cause significant morbidities that may last for a long period of time.