Evaluation of cardiac anomalies incidence and other associated abnormalities in newborns with esophageal atresia

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Abstract

Esophageal atresia is often associated with anomalies of other systems. Hereditary and environmental factors may influence the incidence of associated anomalies, particularly of the cardiac abnormalities. The aim of this study was to investigate the frequency of cardiac abnormalities and other associated anomalies in newborns with esophageal atresia. This retrospective Descriptive- Cross sectional study was conducted on 63 neonates with esophageal atresia hospitalized at Besat Hospitals. The documents were evaluated and data such as age, sex, and birth weight, cardiac and other associated anomalies were recorded and entered the questionnaires. 63 neonates were enrolled in the study. 38 (60.3%) cases were female and 25 (39.7%) were male. The mean age of neonates was 2.33±1.9 days (1-11 days), and mean birth weight was 2678.6 ± 511.3gr (1350-3600gr). Cardiac abnormalities were present in 7 (12%) cases. Tracheoesophageal fistula was present in 54 (85.7%) cases. 15.9% of neonates had other anomalies. Urinary tract anomalies were present in 3.17% cases. Other associated anomalies were anorectal anomalies (4 neonates), and limb anomaly (1 neonate).

This study showed that 15.9% of neonates (with or without tracheoesophageal fistula) had other anomalies. The most common anomalies were cardiovascular, anorectal, and renal anomalies. Detection of associated anomalies with esophageal atresia requires clinical examination, pre-operative renal ultrasound and an echocardiograph of the heart to exclude congenital renal and heart disease.

Speaker Publications:


Abstract Citation:


Biography:

Fatemeh Eghbalian has completed his MD at the age of 25 years from Isfahan University of Medical sciences and pediatrics and neonatology from Tehran University of Medical sciences. She is Professor of Neonatology and director of NICU ward. She has published 3 books and more than 40 papers in reputed journals.