

RISK FACTORS FOR THE MORTALITY OF TETRALOGY OF FALLOT PATIENTS PERFORMED TOTAL CORRECTION IN SOETOMO HOSPITAL

ABSTRACT

Background: Total Correction has been used as the preferred treatment for TOF patients in every part of the world. However, the mortality of TOF patients performed total correction in developing countries was as high as 6.9% to 15.3%. This shows that there are some risk factors for mortality that might affect the outcome of total correction procedure.

Objectives: To identify pre and post operative factors that affect mortality on TOF patients performed total correction in Dr. Soetomo General Hospital.

Methods: This research is a retrospective analytic study with cross-sectional approach for analyzing secondary data from Medical Record Installation Unit at Dr. Soetomo General Hospital.

Result: Majority of mortality was found in male patients (39.3%) while the female's mortality rate was lower (36.8%). The average of patients' age is 84.12 months with standard deviation 65.69. There are some significant ($p > 0.05$) pre and post operative risk factors such as: age below 60 months old ($p = 0.047$), smaller weight and height ($p = 0.008$; $p = 0.002$), oxygen saturation below 75% ($p = 0.018$), temperature above 38.5°C ($p = 0.000$), and ventilator time more than 48 hours ($p = 0.033$).

Conclusions: 1. Mortality rate of TOF patients performed total correction in Dr. Soetomo General Hospital decreases every year 2. Mortality risk factors for ToF that undergo total correction surgery include : younger age, low weight and height, low pre-operative oxygen saturation, high post-operative temperature and prolong ventilator time. 3 There are no significant difference to mortality for risk factors such as pre-operative hematocrite, history of hypoxic spell, previous treatment using BT shunt, comorbid diseases, post-operative complications and prolong ICU stay.

Keywords: *Tetralogy of Fallot (TOF), Total Correction, Risk Factor for Mortality*