

8. COMPARATIVE STUDY OF THE SHORT-TERM SURVIVAL RATE AFTER THE RADICAL CORRECTION AND PALLIATIVE PROCEDURES OF THE FALLOT TETRALOGY AND TETRALOGY OF FALLOT WITH DORV

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Introduction. Tetralogy of Fallot (TOF) is found in about 1 in 3600 live births, constituting 5.5 - 9.7% of all congenital heart malformations and is known as the most common cyanotic congenital heart disease. TOF is the most common congenital cyanotic malformation - 50 - 70%. Although the mortality rate in untreated patients reaches 50% by age of 6, currently there are multiple surgical procedures that correct the TOF and ensure a long-term survival and a good quality of life.

Aim of study. The main objective of this study is to compare the early mortality rate of total repair of TOF, TOF with DORV and palliative procedures between other hospitals and Timofei Moşneaga Republican Clinical Hospital.

Methods and materials. This comparative study is based on an evaluation using a retrospective cohort study of 369 patients results of total repair of TOF, TOF with DORV and palliative surgeries from the Database of Cardiothoracic Surgery within the Timofei Moşneaga Republican Clinical Hospital and a literature review of topic related articles selected from PubMed. Between 2002 and 2022, 396 patients diagnosed with TOF underwent a total repair of TOF, total repair of TOF with DORV and palliative shunts at Timofei Moşneaga Republican Clinical Hospital. The articles were selected from PubMed that contains citations for biomedical literature from MEDLINE, life science journals, and online books. Studies that were found to be the most relevant for this comparative study of early deaths in patients with TOF. The statistical analysis was performed using Windows Chart and Excel.

Results. Because of lack of data, the analysis of early deaths of patients operated at Timofei Moşneaga Republican Clinical Hospital can be compared only to the study conducted by Al Habib HF. Analyzing the early death percentages we can conclude that palliative shunts performed at Timofei Moşneaga Republican Clinical Hospital had a lower mortality rate to the ones presented in Al Habib HF study. The early death percentages in palliative procedure of TOF are quite similar in both 3.03% at Timofei Moşneaga Republican Clinical Hospital and 3.22% in Al Habib HF study. Another interesting observation is that early deaths post TOF total repair had a higher mortality rate at Timofei Moşneaga Republican Clinical Hospital, whereas it is the other way in Al Habib HF study.

Conclusion. The short term death rate of patients with diagnosed TOF without any further surgical operation is as high as 50%, but with a total correction of TOF, TOF with DORV or palliative shunt the early death percentage was lowered to 5.05% at Timofei Moşneaga Republican Clinical Hospital, making it a satisfactory outcome. This huge improvement in early survival rate must also have a big impact on later risk of death for adults with repaired TOF. Compared to other studies Park CS, Al Habib HF and Bacha EA the early death outcome results at Timofei Moşneaga Republican Clinical Hospital are satisfactory.