

27. STAGED SURGICAL CORRECTION IN PATIENTS WITH "FUNCTIONALLY" UNIVENTRICULAR HEARTS



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Introduction. "Univentricular" heart is a term used to describe complex cardiac anomalies, which are characterized by the presence of a single ventricle with pumping function. Patients with univentricular heart face major challenges because they do not have both ventricles co-relatively developed to support normal blood circulation. Staged hemodynamic surgical correction is a complex, stepwise surgical approach in the treatment of patients with a "functionally" univentricular heart, requiring successive surgical interventions to improve hemodynamics and ensure efficient blood flow in the body, and is represented by 3 stages: intersystemic anastomosis/pulmonary artery banding, Glenn anastomosis, and Fontan surgery. Thus, staged surgical correction is often an option to improve and improve life expectancy in this category of patients.

Aim of study. The aim of the study is to evaluate the efficacy, safety and long-term impact of this complex surgical approach, based on the 10-year survival of patients operated by this method.

Methods and materials. Literature review of the PubMed electronic database, 7 articles for the terms "Functioning univentricular heart", "Staged univentricular intervention" and 2 BMJ journals articles .

Results. After reviewing the basic literature, it is found that after early Glenn surgery, early survival is on average 87%, and after late survival is about 65%. In 30% cases after Glenn anastomosis complications are possible such as: superior vena cava syndrome, hilarothorax, pleurisy, anastomosis thrombosis, cardiac arrest. As the last stage of univentricular correction, Fontan operation is performed, which post-operatively presents with the following complications: pulmonary thrombembolism, arrhythmias, progressive postoperative cyanosis, protein-losing enteropathy, liver dysfunction, etc. However, the average survival rate in these patients is high, after analysis of the articles the average survival estimated at 5, 10 and 20 years after Fontan operation was 95%, 91% and 82%.

Conclusion. Although the treatment of patients with "functionally" univentricular hearts is complex and carries a substantial risk of mortality, it is often the only possible route of treatment, which when performed in a timely manner and in accordance with inclusion criteria, gives patients a life expectancy of up to 50 years.