

Jatene surgery in the correction of the transposition of the great arteries: a scientific review of literature

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The transposition of the great arteries (TGA) is a congenital heart defect characterized by the inverted positioning of the artery aorta and pulmonary trunk with the first emerging from the right heart and the second, from the left ventricle. This condition corresponds to approximately 8% of the congenital heart defects, occurring in a frequency of 1 in 3,000 births (Filho et al, 2001). According to Fonte et al in 1976, the analysis of surgical risks and developing risks from medium to long terms of the main techniques applied to correct TGA allows the visualization of the current preference for Jatene anatomical correction, which consists in the section and reanastomosis of the great arteries to their respective ventricles. This review aims to clarify the advantages and complications of Jatene surgery in patients with TGA. Methods and results: This is a literature review based on the analysis of scientific articles (40) provided by the databases Scielo Brasil, Pubmed, Lilacs and Medline, accessed through the Periodic Portal of CAPES. According to Boyard et al in 2001 children who were submitted to Jatene operation, in general, presented normal physical, mental and cardiovascular development, however it is possible to see the existence of problems in the late evolution, like the pulmonary stenosis or the stenosis of the way out of the right ventricle. Massin, in 1999, observed that the supralve stenosis is the main complication in the arterial level, and the prevalence of obstructive lesions of the right heart varies from 3% to 30%. In an article published by Pretre et al in 2001, a serie of 432 neonates operated by Jatene technique passed away in the hospital phase due to myocardial ischemia. Myocardial perfusion studies, developed after the operation, showed high incidence of perfusion defects, suggesting a localized reduction of the coronary flow reserve whose etiology is thought to be related to the surgical aggression in the manipulation of the coronary arteries. Conclusion: The translocation of the coronary arteries remains as the most difficult aspect of Jatene surgery and brings with it risks of primary ischemic injuries and late problems like the stenosis and occlusion of the coronary arteries. Besides, the supralvalvar stenosis is a common complication while the aortic insufficiency is not a very frequent find. Despite the complications, Jatene operation is the best possible alternative for the anatomic and functional restitution of the TGA since the previous techniques of correction (Senning-Mustard) keep the left ventricle with a systemic function, which is not the ideal.