# Complete Transposition of the Great Arteries

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Introduction

Complete transposition of the great arteries is the most common form of neonatal cyanotic heart disease. Transposition is the result of malformation of the conus arteriosus. This complex always has discordant ventriculoarterial alignment, such that the aorta arises entirely or largely from the right ventricle, and the pulmonary artery arises entirely or largely from above the left ventricle. The general categories of complete transposition of the great arteries are as follows: complete transposition of the great arteries with intact ventricular septum (simple form), complete transposition of the great arteries with a ventricular septal defect (complex form), and complete transposition of the great arteries with a ventricular septal defect and left ventricular outflow tract obstruction. The surgical method of choice for complete transposition of the great arteries without left ventricular outflow tract obstruction is an arterial switch operation, performed during the first weeks of life. Currently, the low operative mortality (<5%), low incidence of reintervention (<10%), and promising functional long-term outcome have been well documented. The optimal treatment strategy for complete transposition of the great arteries combined with a ventricular septal defect and left ventricular outflow tract obstruction remains challenging due to its great range of anatomical variability and unsatisfying long-term results. The Rastelli operation has been the method of choice for the past four decades. The procedure can be performed with low early mortality. However, substantial late morbidity and mortality associated with conduit obstruction, left ventricular outflow tract obstruction, and arrhythmias have been reported. An alternative operation, the réparation à l’étage ventriculaire (REV), has the potential to decrease the incidence of left ventricular outflow tract obstruction, thus preserv-