Intraatrial baffle repairs: Intraatrial baffle repairs are rarely performed, although many adolescents and adults survive today with repairs that were done more than 15 years ago. An intraatrial baffle is created to divert venous blood to the mitral valve and pulmonary venous blood to the tricuspid valve using the patient's atrial septum (Senning procedure) or a prosthetic material (Mustard procedure). A disadvantage is the continuing role of the right ventricle as the systemic pump and the late development of right ventricular failure and rhythm disturbances. Other potential postoperative complications include loss of normal sinus rhythm, baffle leaks, and ventricular dysfunction.

Rastelli procedure: This procedure is the operative choice in infants with TGA, VSD, and severe PS. It involves closure of the VSD with a baffle so that left ventricular blood is directed through the VSD into the aorta. The pulmonic valve is then closed, and a conduit is placed from the right ventricle to the pulmonary artery to create a physiologically normal circulation. Unfortunately, this procedure requires multiple conduit replacements as the child grows.

Prognosis: Mortality rate varies dependent upon the anatomy and procedure performed. The operative mortality rate for neonates with TGA and intact ventricular septum is at 6% (Park, 2014). Potential long-term problems include suprapulmonic stenosis and neoaortic dilation and regurgitation, as well as coronary artery obstruction.

Total Anomalous Pulmonary Venous Connection