TGA – Customizable Sample Report

- d-Transposition of the Great Arteries (d-TGA) report Template
- On today's scan, the four-chamber view appears [normal/with ___]; however, on outflow-tract sweeps the pulmonary artery arises from the left ventricle with bifurcation into the right and left pulmonary arteries, and the aorta arises from the right ventricle in an anterior, parallel course to the pulmonary artery. On the three-vessel–trachea view, the great arteries run in parallel with an anterior aorta (the "I-sign"); the aortic arch appears [left/right]-sided and [normal/hypoplastic/suspected coarctation]. Color Doppler shows [adequate/suboptimal] inter-circulatory mixing with a [patent/restrictive] foramen ovale and a [patent/narrowed] ductus arteriosus. No pleural, pericardial, or abdominal effusions are seen. An associated [VSD type/size if present] is [identified/not identified]. The remainder of the anatomic survey is [within normal limits/notable for ___].
- The ultrasound findings are consistent with dextro-transposition of the great arteries (d-TGA), a condition in which the aorta connects to the right ventricle and the pulmonary artery to the left ventricle (atrioventricular concordance with ventriculo-arterial discordance). In utero, babies generally tolerate this circulation because oxygenated and deoxygenated blood can still mix through the foramen ovale and ductus arteriosus. After birth, closure or restriction of these shunts may limit mixing and cause cyanosis, which is why planned delivery at a tertiary cardiac center is recommended.
- We discussed that many fetuses with d-TGA have no extracardiac anomalies and that numerical chromosomal abnormalities are uncommon in isolated cases. When additional anomalies or laterality/arch variants are present, we recommend genetic counseling and testing (chromosomal microarray as first-tier, with consideration of exome sequencing depending on findings and family history). We also explained that, when prenatal mixing appears limited (e.g., a restrictive foramen ovale or ductal narrowing), the newborn may need early balloon atrial septostomy to improve oxygenation before definitive repair.
- We recommend serial fetal echocardiography approximately every 4–6 weeks to reassess the foramen ovale and ductus arteriosus, screen for evolving left-ventricular outflow obstruction or arch hypoplasia, and monitor ventricular function and rhythm. If there is concern for increasing restriction of the atrial septum or ductal constriction, we will shorten the interval between evaluations. A consultation with pediatric cardiology will be arranged, and we will coordinate prenatal discussions with cardiothoracic surgery and neonatology at the delivery center.
- The plan is to aim for term delivery if maternal–fetal status remains stable. Mode of delivery should follow usual obstetric indications. At birth, the neonatal team will assess the baby promptly; prostaglandin E1 may be started to maintain ductal patency if indicated, and early echocardiography will guide the need for balloon atrial septostomy. The arterial switch operation is typically performed in the neonatal period and has excellent contemporary outcomes in experienced centers. Long-term follow-up focuses on the neo-aortic valve and coronary arteries, exercise tolerance, and routine cardiology care.
- We reviewed expected neonatal course, potential need for prostaglandins and catheter-based intervention, surgical repair and recovery, and the overall good prognosis in the absence of major associated anomalies. We discussed warning signs and reasons to contact our team, and we addressed questions about delivery location, immediate postnatal management, and breastfeeding. Recurrence risk for isolated d-TGA is low and near background for congenital heart disease unless a genetic etiology is identified; we can refine this estimate after any genetic results.
- We answered all questions to the family's satisfaction. Follow-up has been scheduled for [date] for repeat fetal echocardiography and care coordination