Intrauterine diagnosis of coronary artery fistula: Case report

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Coronary artery fistulae represent abnormal communications between a coronary artery and a cardiac chamber, great vessel, or the coronary sinus. Prenatal diagnosis of isolated coronary artery fistulae is extremely rare. We report a case of a very large fistula connecting the circumflex coronary artery to the right ventricle just below the septal leaflet of tricuspid valve posteriorly diagnosed at 21 weeks’ gestation. There was right ventricular dilatation at the initial scan. The size of the fistula increased during pregnancy. A postnatal echocardiogram confirmed the diagnosis. Patient developed congestive cardiac failure soon after birth and required surgery for fistula at 17 days after birth. Follow-up echocardiogram following the procedure showed improved forward flow in the descending aorta with decreased RV size. Coronary artery fistulas can be diagnosed accurately during fetal life. Some babies may develop congestive cardiac failure soon after birth requiring early treatment. The correct prenatal diagnosis enabled close perinatal follow-up, prompt clinical evaluation without diagnostic delay and optimal management.