

Fetal Diagnosis of Left Ventricular Diverticulum: A Case Report

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- There is a great number of different fetal cardiac anomalies encountered in routine screening, however prenatal diagnosis of a left ventricular diverticulum is a rare finding - prevalence of congenital LVD is suggested to be 0.5/100,000 births. We present a case of left ventricular diverticulum diagnosed at 25 weeks of gestation. Fetal echocardiography identified a very large, thick-walled diverticulum communicating with the left ventricle. The cardiac situs was normal, with a near-normal axis and moderate cardiomegaly. Left ventricular size and function was normal. The mitral and aortic valve both appeared structurally normal with no regurgitation. There was antegrade flow throughout the course of the aortic arch. Growth was appropriate for gestational age, no other anatomic concerns were identified, and there was no evidence of hydrops.
- Additionally, fetal MRI was performed and could confirm the diagnosis of left ventricular diverticulum. Serial assessments showed no signs of progression, heart failure or arrhythmia.
- A Caesarean was performed at 37 weeks' gestation. The infant weighed 3400grams, Apgar scores were 9/10/10. The infant was transferred to the neonatal intensive care unit for further evaluation. A postnatal transthoracic echocardiogram confirmed the diagnosis of left ventricular diverticulum and demonstrated otherwise normal intracardiac anatomy, only incomplete left bundle branch block was found. No surgical intervention was needed.
- The infant is currently 5 months old, was placed on chronic aspirin and remains asymptomatic. There is no evidence of congestive heart failure, arrhythmia or thromboembolism, respectively.

