

Prenatal Diagnosis of High Grade Atrioventricular Block with Polymorphic Ventricular Premature Contractions due to Congenital Long QT Syndrome Using Doppler Flow Recording

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Abstract: We herein report a case of fetal long QT syndrome with a series of cardiac arrhythmias resulting from a 2:1 atrioventricular block and high grade atrioventricular block with polymorphic ventricular premature contractions leading to ventricular tachycardia. These were detected in late gestation using the M-mode and simultaneous Doppler flow recording of the superior vena cava and the ascending aorta. Simultaneous Doppler flow recording of the superior vena cava and the ascending aorta yields more accurate measurements of the atrioventricular and ventriculo-ventricular intervals compared with the conventional M-mode. It is helpful for diagnosing arrhythmias, including various types of dissociation of atrioventricular conduction and ventricular arrhythmias.

Key words : LQT, Bradycardia, Atrioventricular block, Ventricular tachycardia, Fetal echocardiogram