# Routine screening with fetal echocardiography for prenatal diagnosis of congenital heart disease

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**ABSTRACT**

*Congenital cardiac anomalies are the most common congenital anomalies, occurring in approximately eight of 1000 live births. Proper perinatal and neonatal management is dependent upon accurate prenatal diagnosis. Approximately 10% of fetuses with cardiac abnormalities have identified risk factors; hence most of the anomalies occur in pregnancies without prenatal risk factors. The application of detailed fetal echocardiography for prenatal screening, at present reserved mainly for high-risk cases, requires further evaluation before being recommended for the general population.*

*This article presents our experience of evaluating the accuracy of fetal echocardiography as a screening method in detecting cardiac anomalies in the general population of Singapore. We reviewed data from 39808 pregnant women who received antenatal care at the National University Hospital, Singapore, between January 1986 and December 1994, and who underwent routine fetal echocardiography at 21-22 weeks of gestation. We identified 294 cases of congenital heart defects by fetal echocardiography. We obtained a sensitivity of 85.4% for the detection of congenital heart disease, and a specificity of 99.9% to rule out such anomalies. Our positive and negative predictive rates were 87.7% and 99.9% respectively.*

*We recommend routine screening by echocardiography of all pregnancies at 21-22 weeks of gestation, irrespective of risk stratification, for the prenatal detection of cardiac anomalies, in order to improve prenatal management.*