Congenital Heart Malformations in the fetus with intracardiac echogenic focus in low vs high risk pregnancies.

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Background: To study the prevalence of congenital heart malformations in fetuses with intracardiac echogenic focus (ICEF) in low versus high risk pregnancies.

METHODS: We performed a detailed fetal echocardiography for fetuses who were found to have one or more intracardial echogenic focus in sonographic (US) examination from January 2007 through July 2010. They were divided in two groups: low risk and high risk pregnancies. Risk factors included: Maternal age > 35 years, first degree relative with congenital heart disease, diabetes mellitus, nuchal translucency, single umbilical artery, maternal drugs that affects the fetus, maternal SLE or PKU. Intracardiac echogenic focus was defined as a discrete area of echogenicity noted in the left or right ventricle, that was as bright as bone. In the low risk group participated 72 women. In the high risk group participated 74 women. In 11 cases there was another extracardiac malformation. Maternal age was 19-33 years and the gestational age was 19-35 weeks.

RESULTS: In the low risk group there was two cases of small muscular VSDs. In the high risk group there was 11 cases of congenital heart diseases. Two cases of hypoplastic left heart, 3 cases with ventricular asymmetry, 5 cases with VSD, one case with ASD and VSD, two cases with moderate aortic arch, and one case with echogenic bicuspid aortic valve.

CONCLUSION: Detailed fetal echocardiography is warranted in high risk pregnancies in the presence of intracardiac echogenic focus and other extracardiac malformation.