

Intracardiac Echogenic Focus in the Fetal Heart and its Association with Cardiac Anomaly in the Newborn

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Introduction

An Intracardiac Echogenic focus is a small echogenic area in one or both of the cardiac ventricles, observed in at least two planes. It may also be referred to as papillary muscle microcalcification and is detected on antenatal ultrasonography done between 16 to 24 weeks of gestation.

Aims and Objectives

To determine whether an isolated echogenic intracardiac focus in the fetal heart is associated with Cardiac anomaly in the newborn and to weigh the benefits of doing a fetal echocardiogram and further postnatal evaluation of the newborn in fetuses with this finding.

Materials and Methods

This was a prospective population-based observational study. From 1674 pregnancies, 42 cases of women aged 18–34 years, who had an echogenic focus in the fetal heart as the only abnormality at an obstetric sonogram performed at 16–24 weeks gestation, were studied. These patients were followed up postnatally. An echocardiogram was done at 3 months of life of the newborn and evaluated for the presence of cardiac anomalies which could have been missed during the routine anomaly scan done antenatally.

Results

There were no abnormal outcomes or cases of cardiac anomaly among the 42 pregnancies with an intracardiac echogenic focus as an isolated finding. Echocardiography done to all these 42 newborns turned out to show the heart in normal anatomic configuration.

Conclusion

An isolated echogenic focus in the fetal heart at mid-trimester ultrasound in women aged 18–34 years is not associated with increased risk for Cardiac anomaly and does not necessitate the need for fetal Echocardiogram or a postnatal echocardiogram of the newborn and further evaluation.

Keywords: Intracardiac Echogenic focus, fetal Echocardiogram, cardiac anomalies, prenatal diagnosis