

## Do prenatal intracardiac echogenic foci affect postnatal cardiac function?

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Introduction: Echogenic foci in the prenatal hear is not an uncommon finding.

Objective: To determine whether prenatally diagnosed intracardiac echogenic foci are associated with neonatal cardiac dysfunction and persistence.

Methods: Fetuses in which intracardiac echogenic foci were shown on prenatal sonography at 1 perinatal center from (September 2014 to December 2016) underwent postnatal echocardiography at ages 1 month to 1 year.

A single pediatric cardiologist assessed cardiac function by measuring the left ventricular shortening fraction and myocardial performance index. The presence of tricuspid valve regurgitation was also sought

Results. Prenatally 60 fetuses had intracardiac echogenic foci mean age  $\pm$  SD at diagnosis ( $23 \pm 3 .1$ ). 53 (88.3 %) had left ventricular intracardiac echogenic foci, and 7 (11.6 %) had right ventricular intracardiac echogenic foci.

12 pregnant ladies were lost for follow up (2 fetuses of 7 (28,5%) with right ventricular intracardiac echogenic foci., and 10 fetuses of 53 (18.8%) with LV intracardiac echogenic foci %)

Post natally, those infants, 32 (66.6 %) males and 16 (33.3%) females were examined. at a mean age  $\pm$  SD of  $7.4 \pm 3.1$  months. Prenatally, all infants had a normal left ventricular shortening fraction. The overall mean left ventricular myocardial performance index (reference value,  $0.36 \pm 0.06$ ), was normal for both infants with left ventricular intracardiac echogenic foci ( $0.32 \pm 0.01$ ) and those with right ventricular intracardiac echogenic foci ( $0,33 \pm 0.05$ ).

Trace tricuspid valve regurgitation were noted in 15 (31%) of the infants. Left ventricular intracardiac echogenic foci persisted in 15 infants (34.8%), whereas right ventricular intracardiac echogenic foci persisted in 1 infant (20 %).

Conclusions. Prenatally diagnosed intracardiac echogenic foci can be persistent but is not associated with myocardial dysfunction in the first year of life.

Key words: echocardiography; intracardiac echogenic focus; prenatal diagnosis; sonography.