

JCK E-Oral Presentation

JCK E-Oral Presentation 2 (III-JCKEOP02)

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Sun. Jul 9, 2017 1:00 PM - 2:00 PM E-Oral Presentation Area (Exhibition and Event Hall)

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[III-JCKEOP02-05] Fetal Echocardiography Characteristics in Vietnam Population

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BACKGROUND:

To evaluate the incidence of fetal cardiac abnormalities and to establish normative reference ranges of fetal cardiac characteristics in Vietnamese population.

METHODS:

A cross-sectional study was undertaken on pregnancies examined at Thu Duc district hospital, Ho Chi Minh city from November 2012 to April 2013.

RESULTS:

Two hundred and twenty pregnant women were enrolled in this study.

1. Characteristics: mothers' mean age (years): 30.3 ± 5.0 ; Mean gestational age (weeks): 33.6 ± 4.5 ; Population characteristics: intrauterine growth retardation (1.7%); diabetes (10.1%); genetic mutation (0.8%); abnormalities in routines echo scan (4.2%); twins (1.7%); previous child with congenital heart disease (0.8%); fetal tachycardia (0.8%); screening (78.2%).

2. Fetal cardiac characteristics: heart chest ratio (CTAR, %) = 31.4 ± 4.8 . The mean cardiac dimension on 2D (mm): foramen oval = 4.9 ± 1.4 ; mitral valve = 9.9 ± 2.1 ; tricuspid valve = 10.4 ± 2.4 ; aortic valve = 6.3 ± 1.4 ; pulmonary valve annulus = 7.9 ± 1.8 ; pulmonary trunk = 7.8 ± 1.9 ; right pulmonary artery = 3.9 ± 1.0 ; left pulmonary artery = 3.9 ± 0.9 ; aortic isthmus = 4.9 ± 1.0 . The mean velocities: aortic valve = 0.66 ± 0.15 (0.35-1.00); pulmonary valve = 0.61 ± 0.14 ; aortic arch = 0.74 ± 0.21 .

3. one fetus with ventricular septal defect (0.45%), one fetus with supra ventricular tachycardia (0.45%), one with sinus bradycardia (0.45%) and one with coarctation (0.45%).

CONCLUSIONS:

This is the first report on normal ranges of fetal cardiac dimensions especially in the third trimester in Vietnam.