P08.04 The fetal thymus: determination of 2D ultrasound measurements in normal Indian fetuses

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Introduction

- We need normogram for thymic evaluation for thymic hypoplasia when accurate thymic measurement may not be possible by one fix thymic measurement. We aimed to establish a normogram of the fetal thymus in second trimester (18 to 28 week) of pregnancy by 2D ultrasound – 1. Thymus area (TA) 2. Thymus transverse diameter (TTD) 3. Thymus anterior-posterior thickness (APT)

Methods

- Prospective and cross sectional study. Fetal thymus was measured in 330 normal fetuses between 18 to 28 weeks of gestation between January 2017 to September 2017. Fetal thymus measurement normogram were developed by measuring thymic area by trace method, thymus transverse diameter and anteroposterior thickness of thymus and linear regression curve was developed

Discussion

- All parameters increased with increasing gestational age in a linear manner.
- The regression equation –
  TA = 0.0114x² - 0.3277x + 3.0241
  TTD = 0.0544x² - 1.2903x + 17.326
  APT = 0.018x² + 0.0857x - 1.1389

Results

- NORMOGRAM OF T-D OF THYMUS

- NORMOGRAM OF A-P THICKNESS

Conclusion

This study presents normogram of ultrasound measurements of fetal thymus in Indian population which is similar to other ethnic population across world.