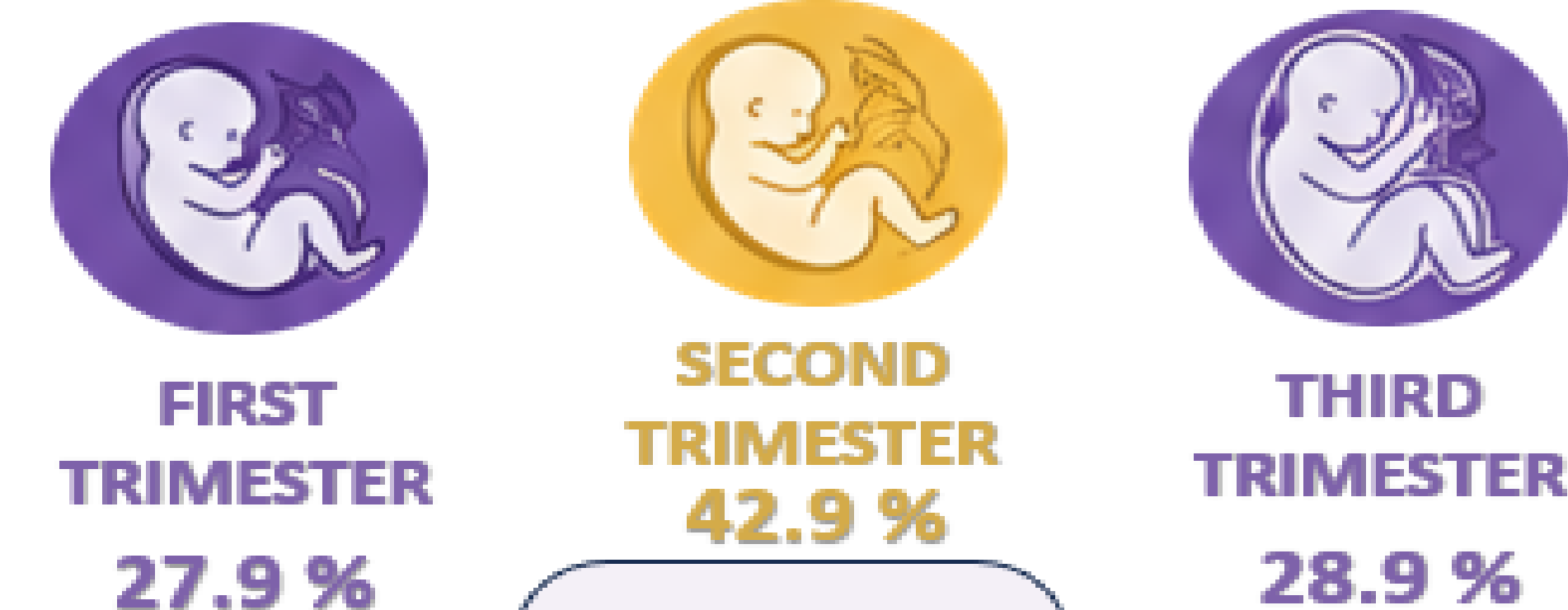


EP05.142 Trimester-Specific Patterns of Fetal Anomaly Detection in Primary Care Ultrasound in Bahrain : A Retrospective Cohort Study

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TRIMESTER-SPECIFIC PATTERNS



- FIRST TRIMESTER (27.9 %)**
 - Increased nuchal translucency
 - Cystic hygroma
 - Early cardiac anomalies
 - Pleural/Pericardial effusions
- SECOND TRIMESTER (42.9 %)**
 - Placental abnormalities
 - Umbilical cord abnormalities
 - Central nervous system anomalies
 - Cardiac defects
 - Abdominal wall defects
- THIRD TRIMESTER (28.9 %)**
 - Small for gestational age (SGA)
 - Fetal growth restriction (FGR)
 - Renal anomalies

★ Rare severe anomaly detected : Sirenomelia

ANOMALIES BY SYSTEM (DISTRIBUTION ACROSS TRIMESTERS)

System	1st Trimester	2nd Trimester	3rd Trimester
Chromosomal markers	HIGH	Moderate	Low / Rare
Central Nervous System	Moderate	HIGH	Moderate
Cardiac	Moderate	HIGH	Low / Rare
Abdominal Wall Defects	Low / Rare	HIGH	Low / Rare
Placental Abnormalities	Low / Rare	HIGH	Moderate
Umbilical Cord Abnormalities	Low / Rare	HIGH	Moderate
Renal	Low / Rare	Moderate	HIGH
Growth Disorders (SGA / FGR)	Low / Rare	Moderate	HIGH

● HIGH ● Moderate ● Low / Rare

Introduction

- Congenital anomalies are a major cause of perinatal morbidity and mortality.
- Routine obstetric ultrasound in the primary screening tool for early detection.
- The timing of detection varies according to fetal development and anomaly type.

Objective

To evaluate the spectrum and gestational age distribution of fetal anomalies detection during routine obstetric ultrasound in a primary care setting in Bahrain.

Methodology

- Study Design:** Retrospective cohort study
- Study Population:** 2,175 consecutive obstetric ultrasound examinations
- Study Period:** 2023 - 2026
- Setting:** Primary care center, Bahrain
- Cases with Suspected Anomalies:** 287 Cases (13.2%)

Analysis

- Classification by organ system
- Stratification by trimester
- Maternal demographic analysis

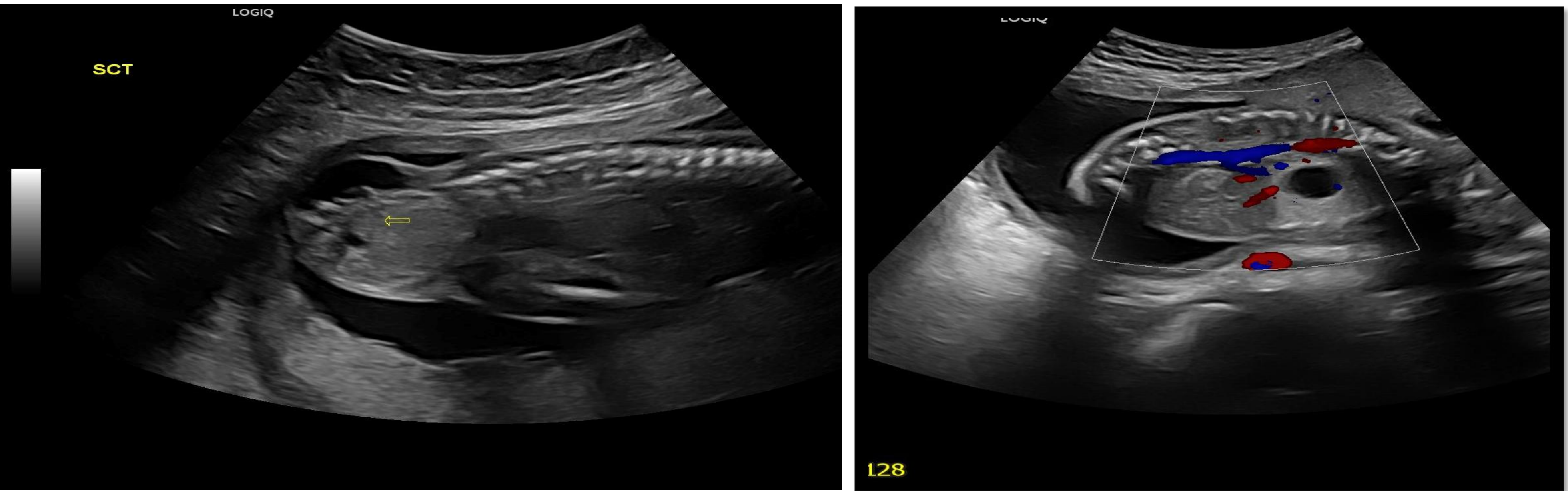


Figure 1. Sacrococcygeal tumor (Left Picture), and Congenital Pulmonary Airway Malformation (Right).

Conclusion

- Detection patterns are trimester-specific.
- Peak detection occurs in the second trimester.
- Early and late scans provide complementary care.
- Primary care ultrasound improves prenatal care.
- Recommendation:** Strengthen staff training and standardize screening protocols.