

EP15.37 Clinical outcome of Fetal Echogenic Bowel (FEB) in a semi-urban referral centre in India

Objectives : Aim to suggest clinical management algorithm of FEB.

Methods : Advance Diagnostics ,Indirapuram ,Ghaziabad .3 -year period (2022–2025). 18 and 24 weeks of gestation with an ultrasound diagnosis of FEB. Sonographic Grading: Grade 1: Echogenicity is high but clearly less than the iliac bone. Grade 2: Echogenicity is equal to the iliac bone. Grade 3: Echogenicity is significantly higher than the iliac bone.
Diagnostic Workup, Detailed Anatomy Scan ,Maternal Serology and Genetic Testing: Parental carrier screening for CF and invasive testing with Placental Assessment by Serial Doppler studies of the Umbilical Artery (UA) and Uterine Artery (UtA) suggested.

Results : The analysis of 450 cases revealed a diverse outcomes. A significant proportion of cases (64.2%) were classified as transient where the echogenicity resolved by the third trimester and neonatal outcomes were normal. However, the remaining 35.8 % represented a variety of significant clinical pathologies. Genetic conditions were identified in 8.5% of the total cohort. Trisomy 21 remained the most frequent chromosomal abnormality. Cystic Fibrosis (CF) was diagnosed in 0.5% of the cohort. We observed a strong correlation between the intensity of bowel echogenicity and the likelihood of CF. Congenital Infections were found in 3.8% .Cytomegalovirus (CMV) was the primary pathogen. Perhaps the most striking finding was the association with placental dysfunction. 23% of the fetuses developed IUGR or were Small for Gestational Age (SGA) at birth.

Conclusions : Proposed Management Algorithm

Stage 1 (Diagnosis): perform a detailed anatomical survey.

Stage 2 (Infection & Genetics): Immediate TORCH serology and CF carrier screening (in Caucasian population). Offer amniocentesis.

Stage 3 (Monitoring): perform serial growth and Doppler assessments every 3–4 weeks starting from 26 weeks' gestation .

Stage 4 (Consultation): Paediatric surgical consult if bowel loops become dilated or if Grade 3 echogenicity persists .

