The detection of anal atresia in the postpartum period in a fetus which diagnosed with hyper-echogenic bowel in the antepartum period

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Aim: Fetal hyper-echogenic bowel is presented as increased echogenicity in fetal bowel at the second trimester sonographic evaluation and a temporary condition in general with 0.1-1.8% prevalence (1, 2). However, it could be detected with cystic fibrosis, Hirschsprung's disease, bowel atresia, intra-amniotic hemorrhages, oligohydroamnios and TORCH infections (3). Herein we aimed to present a case diagnosed as hyper-echogenic bowel in prenatal period and detected anal atresia in postnatal period.

Case: A 29 years old, 36 gestational weeks pregnant woman was followed for perinatological examination due to anhydroamniosis. She had a second degree consanguineous marriage and no family history of infant anomaly. Hyper-echogenic bowels associated with anhydroamniosis were observed in the USG (Figure 1). Cesarean section was performed because of fetal distress. A male, 2370 gr baby was born with 6-7 Apgar. Limb contractures, anal atresia and abdominal distension were detected in the fetus. X-ray images of the baby showed some gas and calcifications compatible with meconium peritonitis in the intestine (Figure 2, 3). Pes equinovarus and pulmonary hypoplasia were also detected. When the anal area of the baby was examined, it was seen that the gluteal muscles were developed minimally and it was considered that an intermediate atresia could be formed there. Infant, planned to undergo colostomy, was exitus before operation because of sepsis and respiratory failure.

Conclusion: Fetal hyper-echogenic bowels that persist in the last trimester may be an indicative finding of the underlying pathology. However, ethiopathogenesis may not always be elucidated by tests. Fetuses with hyper-echogenic bowel were detected by prenatal sonography should also be evaluated carefully for anal atresia and early intervention should be provided in the postnatal period.

References:

Fig. 1: Hyper-echogenic bowel. Fig. 2: Meconium peritonitis. Fig. 3: Stucked gas in bowel.