Prenatal diagnosis of fetal enterolithiasis

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Objective

To present the prenatal diagnosis of fetal enterolithiasis via ultrasound.

Methods

A 42-year-old gravida 2 para 1 woman was referred to our tertiary perinatology centre at 18 weeks of gestation with findings of intraabdominal calcification and anhydramnios. She did not have any complaints and her past medical history was unremarkable. This was a non-consanguineous marriage and their 10 year old child was healthy. In the current pregnancy, she did not report any use of medications, had no history of fever or exposure to radiation. The patient did not recall any leakage of fluid, at admission, no evidence of premature rupture of membranes was found. The patient mentioned that a calcified mass in the fetal abdomen was detected at second trimester anomaly screening.

Results

Ultrasonography during our initial examination revealed a single viable fetus consistent with 19 weeks gestation. The amniotic fluid volume was significantly reduced. In the lower part of the fetal abdomen, there were about 4x3 cm intraluminal meconium calcifications and dilated intestinal segments (Figure 1). Both of the kidneys were sonographically normal. With these findings we considered the diagnosis of enterolithiasis. The family was informed about the poor prognosis of the disease and they opted to terminate the pregnancy. The fetus was delivered at 19 weeks by misoprostol induction. Post-mortem examination demonstrated anal atresia. Meconium, with calcium precipitates were observed in the small intestine and colon (figüre 2). Both of kidneys were normal.

Conclusion

Enterolithiasis is a rare, prenatal ultrasonographic finding heralded by the presence of calculi in the intestines. These calcifications differ from linear calcifications seen in meconium peritonitis, which can occur in the upper abdominal cavity, often adjacent to the liver. The prenatal detection of enterolithiasis carries a poor prognosis. It is generally from a fistula between the anorectum and the urinary tract, and cases of genito-urinary malformations frequently co-exist. The enterolithiasis in this case may have resulted from abnormal bile secretion due to the liver disease, and the decreased bowel fluid due to anhydramnios.

