Quiz

What is your diagnosis?

A 38-year-old, G6P5 woman presenting with acute abdomen at 32th weeks of gestation was evaluated and diagnosed to have cholangitis. On obstetric ultrasound, we identified a fetal intraabdominal mass with a solid and cystic components.

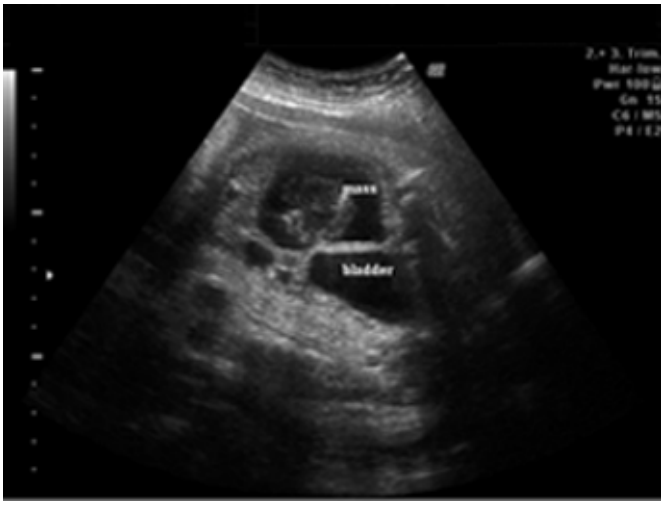

Figure 1.

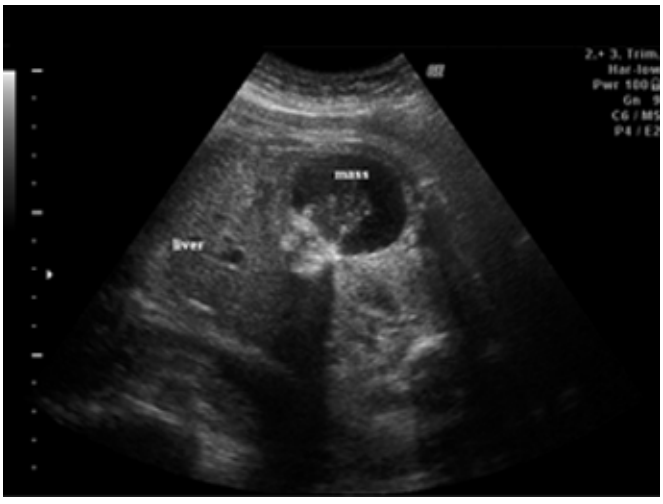

Figure 2.

Please see page 248 for the answers

Answer

Enteric duplications are uncommon congenital anomalies estimated to occur in 1 in 10 000 live births.[1] Isolated cystic duplications of the gastrointestinal tract are extremely rare and most are found in the ileum. This condition is rarely detected prenatally.[2] Males are affected two times more frequent than the females and surgical resection is curative.

Intraabdominal anomalies present a particular challenge to the obstetricians because they can arise from various organs and anatomic sites such as urinary tract, adrenal glands, gastrointestinal tract, liver, spleen, pancreas, gallbladder, female reproductive tract, mesentery or peritoneal cavity. The differential diagnosis may be done with the location and sonographic appearance of the anomaly and presence of other findings.

Distinguishing large bowel from small bowel is possible after 20th weeks of gestation. The large bowel appears as a continuous tubular structure enlarging with meconium, located in the peripery of the abdomen and small bowel is located centrally and remains more echogenic in appearance until the late third trimester.[3] Jejunoileal atresia, volvulus, meconium ileus, Hirsprung disease, enteric duplications, congenital chloridorrhea are the causes of dilated small bowel.

In our case, the fetus was male and the mass was centrally located. Two kidneys and the bladder were identified separetely in normal sizes and locations. The amniotic fluid index was normal. Neonatal neuroblastoma was excluded upon the cystic nature and extraadrenal location of the mass. Ovarian cyst, hidrometrocolpos were less likely because of the male external genitalia. Solid component of this anomaly may reflect ishcemia or meconium with decreased water content secondary to hypoperistaltism of the enlarged ileal area. The neonate was operated at the age of 3 days due to intestinal obstruction. Perforated ileal duplications cyst was observed intraoperatively.

References

1. Gul A, Tekoglu G, Aslan H, Cebeci A, Erol O, Unal M, Ceylan Y. Prenatal sonographic features of esophageal and ileal duplications at 18 weeks of gestation. Prenat Diagn 2004;24:969-971.
2. Nyberg DA, McGahan JP, Pretorius DH, Pilu G. Diagnostic Imaging of Fetal Anomalies. Lippincott Williams and Wilkins. Philadelphia: USA 2003. p. 547-602.
3. Simsek A, Zeybek N, Yagci G, Kaymakcioglu N, Tas H, Saglam M, Cetiner S. Enteric and rectal duplications and duplication cysts in the adult. ANZ J Surg 2005;75:174-176.

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