A case of prenatal diagnosis of fetal bladder exstrophy and ambiguous genitalia

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Objective
To present the prenatal diagnosis of bladder exstrophy and ambiguous genitalia via ultrasound.

Methods
Case report.

Results
A 26-year-old gravida 1 para 0 woman was referred to our perinatology clinic (tertiary center) at 37 weeks of gestation for perinatal care. The personal and family history of the patient were unremarkable. In the current pregnancy, she did not report any medication use, had no history of fever and exposure to radiation. The patient mentioned that a mass protruding from the lower abdominal wall was detected at the ultrasonographic second trimester congenital anomaly screening. Moreover, amniocentesis was performed due to this anomaly and a normal karyotype was confirmed. Ultrasonography during our initial examination revealed a single viable fetus and biometrical measurements consistent with the gestational ages of 36-37 weeks. The amniotic fluid volume was within the normal ranges but a normal and pelvis localised bladder was not visualised. Moreover, an irregular mass protruded anteriorly in the lower part of the fetal abdominal wall was detected. The color Doppler showed that both of the umbilical arteries were located on the either sides of the mass. Both of the kidneys were sonographically normal. And finally, scrotum and micropenis denoting the presence of ambiguous genitalia was detected. With these findings we considered the diagnosis of the co-existence of bladder exstrophy and ambiguous genitalia. These diagnosis were also confirmed postnatally.

Conclusion
The prenatal diagnosis of bladder exstrophy can be made ultrasonographically with the detection of a solid mass in the lower anterior fetal abdomen and umbilical arteries located at the sides of the mass, a non-detected bladder, normal volume of amnion and normal kidneys. In addition, external genitalia should also be carefully evaluated because of the potential co-existent abnormality in these fetal cases.