Prenatal diagnosis of Cantrell’s pentalogy in a twin pregnancy
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Objective
The pentalogy of Cantrell is a very rare congenital syndrome. We report a case of Cantrell’s syndrome diagnosed using two dimensional ultrasound (US) at first trimester.

Methods
A 31 year old primigavid woman presented with a twin pregnancy at 13 weeks of gestation for evaluation of structural abnormalities in one co-twin. The marriage was non-consanguineous. There was no history of genetic disorders or structural anomalies noted in the both parents. This was her first pregnancy and it was achieved by in vitro fertilization (IVF) and embryo transfer. One embryo had been implanted and a monochorionic twin pregnancy was achieved. There were 2 previous ultrasound examinations performed at 7 and 9 weeks of gestation in another hospital. The first US scan showed living monochorionic-diamniotic twins. It has been documented that one of the twins died at 9 weeks of gestation.

Results
Our first evaluation with ultrasonography revealed an alive co-twin with a large omphalocele containing herniated liver, spleen and bowel loops, ectopia cordis increased nuchal translucency (NT) and sacral myelomeningocele at 13 weeks (Figure 1). Genetic amniocentesis was offered but the parents did not accept it and they decided to pregnancy termination, which was achieved by induction with misoprostol at 15 weeks of gestation. Post abortion examination and autopsy confirmed the prenatal sonographic findings. (Figure 2) Figure 1. Two-dimensional sonogram demonstrates a large omphalocele with ectopia cordis (a. B mode b. Colour Doppler). Figure 2. Post abortion examination confirmed the prenatal sonographic findings.

Conclusion
The pentalogy of Cantrell is seen rarely. The associated defect of omphalocele and ectopia cordis is the major hallmark of this syndrome. Full spectrum consists of 5 anomalies: anterior diaphragm deficiency, defect in the diaphragmatic pericardium, lower sternum and midline supraumbilical abdominal wall, along with various congenital cardiac abnormalities. The etiology is still unknown. The hypothesis underlying this condition is developmental failure of a segment of the lateral mesoderm between 14 and 18 days after conception. The anterior midline ventral wall defects also may be caused by either monozygotic twinning or vascular dysplasia. Cardiac lesions may vary widely it may be associated rarely with other central nervous system and craniofacial malformations such as neural tube defects, encephalocele, meningocele, anencephaly, exencephaly, spina bifida and craniorachischisis. Prenatal diagnosis is extremely important because the prognosis is poor and the disease may lethal. If a diagnosis is made by ultrasound, fetal chromosomal analysis is recommended. Following prenatal diagnosis, termination of pregnancy may be offered in severe cases when amniocentesis shows an abnormal karyotype. Increasing awareness of this rare condition can help to obstetricians in making a diagnosis before viability and thereby an option of termination of the pregnancy.