



Early prenatal diagnosis of thoraco-omphalopagus twins at ten weeks of gestation by ultrasound

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Objective

Early prenatal diagnosis of conjoined twins, an extreme form of monozygotic twinning, is very important for further management and counselling of parents because they are associated with high perinatal mortality. We present a case of thoraco-omphalopagus twins diagnosed at ten weeks and four days of gestation by two-dimensional Doppler ultrasound, which was then terminated.

Methods

Transabdominal US scan using a 5 MHz probe with 2-D Doppler US (Voluson 730 PRO, GE Medical system) revealed a monochorionic monoamniotic twin pregnancy of 10 weeks and four days of gestation, according to her last menstrual date. One of the fetuses was anencephalic. Both fetuses had cystic hygroma. The fetuses were fused to each other at the chest (thoracopagus) and the umbilicus (omphalopagus). Two upper and two lower extremities were seen for each fetus. There was only one heart beat. This was confirmed using a 5 MHz transvaginal probe.

Results

A 32 years old gravida five, para two, abortus two was referred to our perinatology clinic for the first trimester screening with a combined test. Her obstetric history revealed two spontaneous vaginal deliveries and was unremarkable with respect to use of medication or previous births with structural or chromosomal abnormalities. There was no family history of multiple gestations. Transabdominal US scan using a 5 MHz probe with 2-D Doppler US (Voluson 730 PRO, GE Medical system) revealed a monochorionic monoamniotic twin pregnancy of 10 weeks and four days of gestation, according to her last menstrual date. One of the fetuses was anencephalic. Both fetuses had cystic hygroma. The fetuses were fused to each other at the chest (thoracopagus) and the umbilicus (omphalopagus). Two upper and two lower extremities were seen for each fetus. There was only one heart beat. This was confirmed using a 5 MHz transvaginal probe. A diagnosis of conjoined twins was made using sonography. The couple was informed about the US findings and counseled about management options. They decided to terminate the pregnancy. The abortion material was sent for pathologic examination. The result was conjoined twins with two bodies fused from the upper thorax to lower belly. Both fetuses were female. Two upper and two lower extremities were seen for each fetus. The pathology report revealed one heart, one liver, two stomachs, and two kidneys shared by the twins. Therefore, the ultrasonographic diagnosis of conjoined twins of thoraco-omphalopagus type was confirmed.

Conclusion

Conjoined twins are very rarely seen in human pregnancies. However, they should be kept in mind as a possibility in case monozygotic twins at 11-14 weeks, especially when an increased NT is observed, because early and accurate diagnosis of such cases is essential for counselling and helping parents decide for or against continuation of pregnancy. If the parents decide to continue the pregnancy, prenatal surveillance and postnatal management should be planned by an interdisciplinary medical team.