

Ultrasound diagnosis of thoracopagus conjoined twins in the first trimester

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Objective

To describe the ultrasound findings in a first trimester case. Although 2-dimensional ultrasonography was able to demonstrate the anomaly, the added value from 3-dimensional ultrasonography had facilitated a more definitive diagnosis and presentation to the patient. To review the ultrasound findings of a second trimester case from our department.

Methods

The patient was a 35 year-old Chinese lady, gravida 2 para 0. Her first pregnancy ended in early miscarriage; there was no other medical history of note. Ultrasound at 6. 3 weeks amenorrhoea noted a 2. 0cm gestational sac with a single yolk sac. There was no embryo demonstrated. At 7. 3 weeks amenorrhoea, ultrasound showed a viable embryo of 9mm, concurring with 6. 9 weeks. When she presented for first trimester screening at 11. 9 weeks, twins were demonstrated. They were joined at the thorax and there appeared to be a common heart shared by the twins. Findings were suggestive of thoracopagus conjoined twins.

Results

A fetal anomaly scan performed six hours later did not show any change in the fetal appearances or the position of the fetus relative to each other. Thoracopagic conjoint twins were confirmed. The patient was counselled regarding the dismal outcome and she opted for a termination of pregnancy.

Conclusion

Monozygotic monoamniotic twinning may result in conjoined twins, a rare event occurring with an incidence of 1 per 100, 000 births. Ultrasonography will probably be the first imaging modality to identify the anomaly. Sonographically, the anomaly may not be obvious at less than seven 7 weeks gestation.