LETTER TO THE EDITOR

Incidental Detection of Thoracoomphalopagus at Amniocentesis in a Twin Pregnancy

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A 41-year-old, gravida 2, para 1 woman was referred for amniocentesis at 16 weeks of gestation because of advanced maternal age. Her husband was 48 years old. The couple had a 2-year-old healthy son. She had never undergone assisted reproductive technologies (ARTs). Prenatal ultrasound at 8 weeks of gestation did not detect conjoined twins (Fig. 1). At 16 weeks of gestation, prenatal ultrasound examinations before amniocentesis revealed conjoined twins with thoracoomphalopagus and separate hearts (Fig. 2). The woman refused to undergo amniocentesis and elected to terminate the pregnancy, and a 214-g female thoracoomphalopagus was delivered (Fig. 3). Postnatal cytogenetic analysis of fetal tissues revealed a karyotype of 46,XX.

The present case provides evidence that physicians should alert conjoined twins at amniocentesis in monoamniotic twin pregnancy. Conjoined twinning occurs in 1:100 monozygotic twin sets, 1:50,000 gestations, or 1:250,000 live births [1,2]. About 75% of conjoined twins are female [3]. Conjoined twins can be detected in the first trimester of pregnancy [3] and beyond [4–6]. There is no association with maternal age and parity in the cases with incidence of conjoined twinning [3]. However, monozygotic twinning occurs at a significantly higher rate following ART in comparison with natural incidence [7].

Fig. 1 Prenatal ultrasound findings at 8 weeks of gestation.
Fig. 2  (A) Twin A and (B) twin B with heartbeats in each individual, and (C) fused thorax and abdomen at 16 weeks of gestation.

Fig. 3  (A) Thoracoomphalopagus at birth and (B) the corresponding roentgenogram.
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References