

Fetal echocardiography and postnatal electrocardiographies of omphalopagus twins

Omfalopagus ikizlerde fetal ekokardiyografi ve postnatal elektrokardiyografi

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A 25-year-old mother with a history of previous baby with the diagnosis of VACTERL association (presence of at least 3 of following 6 anomalies: Vertebral, Anal, Cardiac, TracheoEsophageal, Renal, Limb) was admitted to the Pediatric Cardiology Unit for fetal echocardiography. Previous baby had had tracheoesophageal fistula/esophageal atresia, tetralogy of Fallot, polydactyly, atresia of right kidney and atresia of external ear. Present pregnancy was uneventful until 32nd week. At the 32nd week of gestation obstetrician has detected encephalocele in fetus, and referred mother to our hospital. She

was later referred to cardiology unit for fetal echocardiography by neonatologist who was the first physician contacted to the family. With the knowledge of a single fetus, the heart of the fetus was visualized, and a single atrium, single atrioventricular valve and a large ventricular septal defect (VSD) were detected (Fetus 2 in Fig. 1). During echocardiographic study a second heart beat was noted, and the heart seemed to be normal (Fetus 1 in Fig. 1). So a twin pregnancy was suspected. With the help of a ultrasonographer the twin pregnancy was confirmed. But, during the following echocardiographic study the twins remained very close at their chest and, although they were moving their extremities, both hearts continuously remained in the same echocardiographic section. So it was suspected that twins may be conjoined. Detailed ultrasonographic examination clearly demonstrated that the twins were omphalopagus with shared liver.

Postnatal echocardiography revealed the presence of a large atrial septal defect, ventricular septal defect and pulmonary atresia in fetus 2. The heart of the second baby was normal. Postnatal electrocardiographies of both babies showed independent QRS complexes with similar heart rates (Fig. 2).

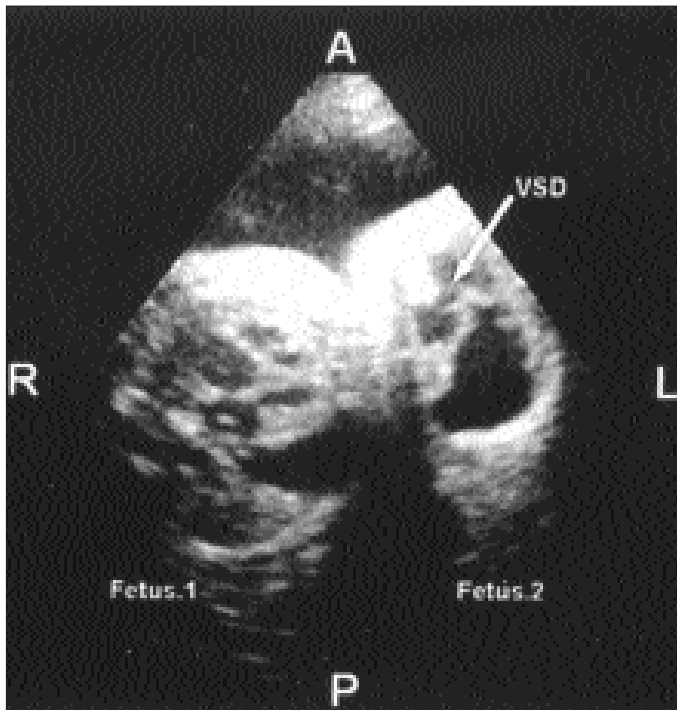


Figure 1. Fetal echocardiographic image depicts the hearts of both fetuses in the same section. VSD- ventricular septal defect.

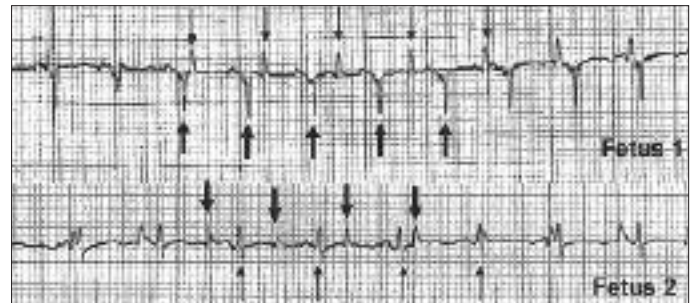


Figure 2. Postnatal electrocardiographies of the babies indicate two independent QRS complexes in lead II. Larger arrows indicate the heart beats of baby 1 (fetus 1), and the small arrows to baby 2 (fetus 2).