Comparison of ultrasound and postmortem findings in third trimester detection of thoracoomphalophagus conjoined twins: a case report.

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Introduction
Conjoined twins are rare with an incidence of 1:50,000 to 100,000 life births; commonest being the thoracoomphalophagus type. Prenatal diagnosis and fetal echocardiography are integral in assessing feasibility of separation.

Case Report
An illegal immigrant in her fourth pregnancy presented with breakthrough seizure. She had underlying epilepsy and had no antenatal care. Upon assessment, she was carrying a pair of thoracoomphalophagus conjoined twins at 29 weeks gestation.

Ultrasound findings
The prenatal scan revealed conjoined twins from thorax up to the cord insertion, sharing a heart and liver. The hearts were fused and appeared as 4 chambers with a large atrioventricular septal defect (AVSD). There were separate outflow tracts for each. The tricuspid and mitral valves were not seen. The rest of the anatomy except for the fused livers, were unremarkable in these female fetuses. The intracardiac anatomy rendered it as type 4, deeming it inoperable1.

Management
A lower segment Caesarean section was performed at 31 weeks gestation and twins weighing 2.68kg were born alive but succumbed a few hours later.

Post mortem findings
Right twin labelled as twin 1 and left as twin 2. There is a cleft lip and palate in twin 2. The hearts with its pericardium and thymus are fused. It is a single chamber system with presence of incomplete atrioventricular septum within both hearts and incomplete ventricular septum within heart of twin 2. The ventricular septum and heart valves of twin 1 are absent. All branches of outflow tracts are present and separate for each twin. Both twins have patent ductus arteriosus. The livers were fused at the superior region. The duodenum is fused up to the midpoint of the small bowel after which it separated up to the anus. The other findings were unremarkable. Cause of death is lethal congenital heart malformation.

Conclusion
Even at advanced gestation, ultrasound findings are relatively accurate to counsel patients on management and prognosis especially when financial constraints limit the option of other imaging modalities.

References