Esophageal atresia: prenatal detection rates in multiple versus singleton pregnancies
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Objective
Esophageal atresia (EA) with or without tracheoesophageal fistula (TEF) occurs in 1: 3,500 live births. Prenatal suspicion of EA/TEF arises in fetuses that presented with polyhydramnios, small/absent stomach bubble or esophageal pouch. Previous studies have shown the prenatal detection rate of this anomaly to be between 9.2%- 57% depending on operator expertise and index of suspicion. The presentation and detection rate of EA/TEF in twin versus singleton pregnancies has never been previously studied. Our aim was to compare the characteristics, detection rate and prevalence of sonographic cues of EA/TEF in multiple vs. singleton pregnancies at a tertiary center.

Methods
A retrospective study of all EA/TEF cases born at Sheba Medical Center between 2005-2018 was undertaken. Data from computerized maternal and neonatal medical records was retrieved, including prenatal ultrasound scans, genetic evaluation, maternal demographic details and postnatal course. SPSS software was used for all statistical analysis.

Results
Over a 13-year period, there were 61 neonates born with EA/TEF. Thirteen neonates were of a twin pregnancy (6 monochorionic and 7 dichorionic) and 48 were singleton. Isolated EA/TEF, VACTERL associated and non-VACTREL multiple anomaly associated EA/TEF occurred in 30.8%, 46.2% and 23.1% of the twin cases and in 36.2%, 57.4% and 6.4% of the singleton cases (NS). The most frequent type of EA/TEF in both groups was C. All of the twin pairs were discordant for EA/TEF, regardless of chorionicity. The prenatal detection rate of this condition was significantly lower among twins (16.7% vs. 61.5%, p=0.01). Small/absent stomach bubble was significantly less reported in the twin group compared to the singleton group (16.7% vs. 65.4%, P=0.005).

Conclusion
The prenatal detection rate of EA/TEF is lower in twin versus singleton pregnancies. Small/absent stomach bubble is less frequently reported in multiple pregnancies, reflecting either a true phenomenon or a lower perception of details.