Objective
Prenatal suspicious of esophageal atresia (EA) with or without tracheo-esophageal fistula is rare and diagnosis is possible only in a minority of cases. Polyhydramnios and small/absent stomach bubble are considered non-specific/indirect signs of potential EA. Aim of our study is to assess the role of upper pouch sign (UPS) in prenatal diagnosis of EA.

Methods
Prospective collected data was performed. We evaluated all prenatal ultrasound scans of fetuses referred for suspected EA between January 2009 and August 2016. Presence of polyhydramnios, small/absent stomach bubble, and the presence of UPS were evaluated. Persistence (≥3 repeated measurement) of both polyhydramnios and small/absent stomach bubble was also evaluated. Fisher exact test was used as appropriate.

Results
46 patients were referred for suspected EA during the study period. There were 4 terminations of pregnancy and 3 other patients quit prenatal follow-up before delivery. Thirty-four fetuses were prospectively followed up during pregnancy and reevaluated after birth. From the remaining 39 cases, EA was confirmed prenataly and 10 of these cases were associated with genetic syndromes. Results are presented in the table.

Conclusion
Our data suggest that repeated prenatal evaluation has crucial importance in prenatal diagnosis of EA. Polyhydramnios and UPS are frequently detected in EA cases confirmed postnatally. One-off detection of isolated polyhydramnios and/or absent/small stomach has no role in prenatal suspicion of EA, while the persistence of those signs are statistically encountered in postnatally confirmed EA cases. Strong prenatal suspicious of EA seems to correlate with high prevalence of LGEA and/or syndromic association.