Objective
To analyse computerized cardiotocography (cCTG) parameters throughout gestation in fetuses with isolated gastroschisis.

Methods
Retrospective longitudinal analysis of cCTG records from fetuses with isolated gastroschisis between April 2012 to March 2015. Inclusion criteria was a repeated cCTG record in each gestation period: 28 to 30 weeks, 31 to 33 weeks and 34 to 37 weeks. All cCTG were performed using the Sonicaid System 8002. The duration of cCTG records were considered at least 30 minutes if criteria was met or otherwise continued for up to 60 minutes. For analysis one cCTG record per fetus in each gestational age period was considered. Friedman non parametric test was applied to evaluate the FHR parameters across gestation periods.

Results
During the study period, 90 fetuses with isolated gastroschisis underwent cCTG evaluation and 35 of these fulfilled the inclusion criteria. Thirty-four fetuses were livebirths at a mean gestational age of 36.46 ± 0.89 weeks (34.7 - 37.7wks). The mean birth weight was 2293 ± 521g (1465-3190g). One fetus died in uterus at 36 weeks gestation. The analysis of cCTG parameters expressed in median (range) according to the respective gestational age periods (28-30, 31-33 and 34-37) were:
- Fetal movements/hr: 19 (0 - 150), 21 (0 - 191), 16 (0 - 122); p = 0.513.
- Basal heart rate (bpm): 141 (124 - 165), 139 (123 - 178), 146 (120 - 167); p = 0.974.
- Short term variation (ms): 7.9 (4.8 - 14.8), 8.2 (4.2 - 14.2), 6.9 (3.0 - 15.1); p = 0.086.
- Accelerations >10 ≤15 (bpm): 2 (0 - 10), 3 (1 - 12), 3 (0 - 7); p = 0.108.
- Accelerations >15 (bpm): 2 (0 - 12), 3 (0 - 11), 2 (0 - 13); p = 0.619.
- High episodes (minutes): 9 (0 - 32), 10 (0 - 39), 9 (0 - 33); p = 0.710.
- Low episodes (minutes): 0 (0 - 37), 0 (0 - 44), 10 (0 - 57); p = 0.004.
- Minor decelerations (area ≤20 lost beats): 0 (0 - 3), 1 (0 - 3), 0 (0 - 3); p = 0.090.
- Significant decelerations (area >20 lost beats): 0 (0 - 1), 0 (0 - 3), 0 (0 - 1); p = 0.877.

Low episodes duration was the only parameter that showed significant change according to gestational age period.

Conclusion
The cCTG parameters of the fetuses with isolated gastroschisis does not change significantly with gestation, therefore seems to have a different pattern than normal fetuses.