Anterior abdominal wall defects: correlation between antenatal findings and postnatal outcome
Kapeti E, Formuso C, Greco Y, Steingold A, Aquilina J, Quaresima P, Greco E
Department of Fetal and Neonatal Medicine, The Royal London Hospital, Barts Health NHS Trust, London UK, London, United Kingdom

Objective
The aim of the study was to review anterior abdominal wall defects (AWDs) diagnosed prenatally and to correlate ultrasound findings with surgical outcomes.

Methods
Retrospective review of AWDs diagnosed over 18 months in a single tertiary unit in UK. Prenatal and genetic findings were correlated with pregnancy outcomes, surgical diagnosis and management.

Results
Thirty-eight fetuses were diagnosed with AWDs (20 exomphalos and 18 gastroschisis). Prenatally, exomphalos were classified into major (containing liver) and minor. Major exomphalos was isolated in 64%, or associated with structural (18%) or genetic defects (18%). Two aneuploid fetuses had Trisomy 18. There were 6 livebirths (55%), all with isolated defects, 4 MTOP (36%), 1 IUD (9%). Prenatal diagnosis matched surgical in all cases. Primary closure occurred in 83% cases. Minor surgical complications occurred in 50% of cases. Mean time to start feeds was 5.3 days (2-10), full feeds was 14.7 days (8-27) and to discharge was 42 days (14-150). Minor exomphalos was isolated in 56%, associated with structural or genetic defects in 33% of cases. In this group there were 6 livebirths (67%), 1 miscarriage (11%), 2 MTOP (22%). Prenatal diagnosis matched surgical in 80%, with two cases reclassified as major. Primary closure occurred in 83%. Minor surgical complications occurred in 40% of primary closure cases. Mean time to start feeds was 6.2 days (5-10), full feeds was 9.2 days (8-13) and discharge was 12.2 days (7-14). All gastroschisis were isolated. Three cases were complicated antenatally (anhydramnios, bladder herniation and hyperechogenic material in the loops). In this group there were 15 livebirths (85%), 1 IUD (5%), 1 MTOP (5%), 1 NND (5%). Prenatal diagnosis matched surgical in all cases. Primary closure occurred in 67% of cases. Minor surgical complications occurred in one case with staged repair. Mean time to start feeds was 8.8 days (5-18), full feeds was 25.3 days (13-42) and discharge was 35.6 days (21-54).

Conclusion
Prenatal diagnosis was discrepant in 20% of cases of minor exomphalos. Our data suggests that gastroschisis should not be regarded as condition without significant morbidity as shown by the unfavourable outcomes in this group. Postnatal surgical outcomes in terms of need for staged repair, time to start feeds and to full feeds were similar to the exomphalos major group. Larger studies are needed in order to establish universal classification criteria based on prognostic factors to guide prenatal counselling.