**PP-076**

**Trisomy 21 presenting with megacystis in the first trimester: a case report**

Elif Gül Yapar Eyi, Şahin Özkan, Deniz Oluklu  
Zekai Tahir Burak Women’s Health Education & Research Hospital, Ankara, Turkey

**Objective:** Fetal megacystis has been reported to occur in 1/1500 pregnancies and defined by a longitudinal bladder diameter of 7mm or more. If the longitudinal bladder diameter is 7-15 mm there is a risk of about 25% that the fetus will have a chromosomal defect. If the bladder diameter is >15 mm, the risk of chromosomal defects is about 10%. We here-present the sonographic and Doppler findings in a fetus with megacystis and trisomy 21.

**Case:** A 31-year-old woman, an agricultural engineer, at her first pregnancy has had chemical exposure for 5 years had an operation of patent ductus arteriosus at one and a half year of age and having a sibling with Down Syndrome was referred to antenatal clinics at 13 weeks of gestation due to increased risk of combined test. Nuchal translucency at a crown-rump length(CRL) of 51mm was reported to be 3.3 mm at 11+4 weeks of gestation. Pregnancy associated plasma protein A(PAPP-A) level was 0.35 MOM and free βhCG level was 1.43 MOM Her combined risk was calculated to be under 1/50 at 11th week. Sonographic examination revealed longitudinal bladder diameter of 16 mm with echogenic and enlarged kidneys, absent nasal bone, abnormal ductus venosus flow, echogenic cardiac focus and tricuspid regurgitation. Chorion villus sampling was performed and karyotype analysis revealed trisomy 21. Patient and her husband were counselled and pregnancy termination with vaginal misoprostol was performed at 14 weeks.

**Results:** The fetal urinary tract can be visualized ultrasonically from 11 weeks onwards, allowing recognition of megacystis at 11-14 weeks, which warrants comprehensive risk assessment of possible underlying chromosomal aneuploidy. As the evaluations of the nasal bone, ductus venosus, tricuspid valve function, frontomaxillary facial angle, hyperechogenic bowel, intracardiac echogenic focus, and renal pelvis fullness can become part of the 11- to 13 (+6)-week screening test if the imaging protocols are standardized, these markers and detection of fetal megacystitis prompt us to evaluate fetal karyotyping, by using either invasive techniques or fetal DNA from maternal blood.

**Conclusion:** Fetal megacystis with increased NT is a severe condition when diagnosed in early pregnancy for chromosomal abnormality and this finding may be an early sign of Trisomy 21.

**Keywords:** Megacystitis, trisomy 21.

---

**PP-077**

**First trimester sonographic findings of alobar holoprosencephaly with cyclopia, proboscis, omphalocele, single ventricle in a fetus with trisomy 13**

Elif Gül Yapar Eyi, Şahin Özkan, Fatma Salih  
Zekai Tahir Burak Women’s Health Education & Research Hospital, Ankara, Turkey

Alobar holoprosencephaly with cyclopia is a rare lethal congenital anomaly frequently accompanied by other malformations and characterized by large variations in incidence. It is included into the disorders of formation of the structures derived from the “mediobasal prosencephalon”. The prosencephalon is the anterior end of the neural tube and consists of the telencephalon which gives rise to the cerebral hemispheres and striatum, and the diencephalon which gives rise to thalamus, hypothalamus globus pallidus and eye. Several malformations showing various severity belong to this category and the the most serious defect from this group of anomalies; prosencephalon has not divided into two parts supposed to become the hemispheres is alobar holoprosencephaly with cyclopia: single eye, absent nose, supraorbital proboscis. We herein present the sonographic and post-mortem findings of a 13 weeks fetus with alobar holoprosencephaly with cyclopia and probiscus from a 37 year old woman G6 P:5 woman. with no known exposure to teratogens and drugs. Single ventricle and omphalocele were also detected and karyotype analysis revealed trisomy 13.

**Keywords:** Trisomy 13, holoprosencephaly, cyclopia.

---

**PP-078**

**The role of ultrasonographic markers for prediction of first trimester pregnancy outcomes**

Ebru Ersoy, Ali Özgür Ersoy, Esra Yaşar Çelik, Sibel Özlär, Metin Altay, Orhan Gelenen  
Etilk Züleyde Hanım Women’s Health Training & Research Hospital, Ankara, Turkey

**Objective:** Examining certain ultrasonographic parameters during the first trimester of pregnancy and determining their role to predict first trimester outcome.

**Methods:** It’s a prospective cohort study including 210 pregnant women that admitted to Ankara Etilk Zübeyde Hanım Women’s Health Training and Research Hospital Antenatal Care Unit. Patients’ gestational age were calculated according to last menstrual period. Embryonic heart rate and Yolk sac diameter were evaluated ultrasonographically during first 12 weeks of pregnancy and then patients who have lost their conceptus were confronted with non-aborted
ones at the end of 12 weeks of pregnancy. Mono-directional variance analysis was used to determine the correlation between Yolk sac diameter and menstrual age, also between embryonic heart rate and menstrual age. (Menstrual Age) minus (Mean Sac Diameter related Age)', 'Yolk Sac Diameter/Mean Sac Diameter ratio', '(Mean Sac Diameter) minus (Crown-Rump Length)' were compared between 'the group of first trimester aborted' and 'the group of first trimester non-aborted' with Independent T-Test. Regression analysis was performed for parameters, suitable graphs and curves were drawn. Fisher Exact Test was performed to determine the decisiveness of 'Embrional Heart Rate<120/minute' and '(Menstrual Age) minus (Mean Sac Diameter related Age)' values.

**Results:** Yolk sac diameter was decisive to predict abortion except 6-8 weeks of first trimester pregnancy (p≤0.001). Yolk sac diameters were increasing as gestational sac diameter and CRL (Crown-Rump Length) increased. Embryonic heart rate (lesser than 120 pulse per minute) was substantially decisive to predict abortion in all groups (p<0.001). The difference between 'Menstrual Age' and 'Mean Sac Diameter related Age' was substantially different between groups of aborted and non-aborted in the first trimester of pregnancy (p=0.024).

**Conclusion:** Embryonic heart rate had a progressive rise in women that brought to completion of a healthy first trimester. Embryonic bradycardia can be used as a prognostic factor to predict adverse pregnancy outcomes. Yolk sac diameter and absence of yolk sac parameters needs further investigations. As the difference between 'Menstrual Age' and 'Mean Sac Diameter related Age' was substantially different between groups of aborted and non-aborted in the first trimester of pregnancy (p=0.024).

**Keywords:** Marker, first trimester, embryonic heart rate.

**PP-079**

**The correlation between gestational age and the length of the clavicle**

Fazıl Avcı, Salih Serin, Murat Bakacak, Önder Ercan, Bülent Köstü, Deniz Cemgil Arıkan

Department of Gynecology and Obstetrics, Faculty of Medicine, Süttü Imam University, Kahramanmaraş, Turkey

**Objective:** To evaluate correlation between gestational week and fetal clavicle length (CL) until 27 week’s gestation.

**Methods:** This study was cross-sectional study of patients between 14 and 27 weeks’ gestation. Inclusion criteria was well-established dates (confirmed with early ultrasound), singleton, non-anomalous fetuses, and intact amniotic membranes with enough amniotic fluid. Sonographic measurements such as biparietal diameter (BPD), head circumference (HC), abdominal circumference (AC), femur length (FL), humerus length (HL), estimated fetal weight (EFW), clavicle length (CL) and cerebellum diameter. Pearson’s correlation and P-values for the relationships between CL and other biometry measurements were estimated.

**Results:** We evaluated 77 patients in our clinic. All attempts assessing the CL were successful. Mean maternal age was 29.11±5.85 years, median gravidity 3 (range 0–10), and median parity 2 (range 0–5). Fetal CL, BPD, HC, AC, HL, FL, fetal weight and cerebellum diameter were correlated significantly and strongly with gestational week and also Pearson correlation values were 0.965, 0.951, 0.917, 0.964, 0.959, 0.965, 0.925 and 0.954, respectively (all p<0.01).

**Conclusion:** We suggest that the clavicle diameter as millimetres by ultrasonography was found significantly positive correlation with gestational weeks. We suggest the 1 mm = 1 week rule should be used because of anomaly of cerebellum and vermis and also for patients had unknown last menstrual day. The lenght of clavica may use to detect gestational week.

**Keywords:** Clavicle, fetal biometry, gestational age.

**PP-080**

**Ultrasound management of uncommon ectopic pregnancy**

Meriem Ajroudi, Kaouther Dimassi, Fatma Douik, Nizar Ben Assia, Amel Triki, Mohamed Faouzi Gara

Department of Obstetrics and Gynecology, Mongi Slim Hospital, La Marsa, Tunisia

**Introduction:** With the improvements in ultrasound equipment as well as the easy access to quantitative beta-human chorionic gonadotropin (β-hCG), the timing of diagnosis of ectopic pregnancy has moved to the early part of the first trimester. Ectopic pregnancies of unusual location are encountered much less frequently, but are perhaps more morbid. The treatment of these unusual ectopic gestations may not be as common place as treatment of tubal pregnancies, but with early diagnosis and effective planning, their treatment can be equally as effective.

**Objective:** Describing cases of uncommon ectopic pregnancies which were managed with ultrasound-guided local injection of KCl, followed by intramuscular injection of MTX if appropriate. Explaining the modalities of the conservative treatment and detailing the clinical biological and ultrasound monitoring.

**Methods:** It’s a retrospective study over a period of 3 years which included patients presenting an ectopic pregnancy on