Keywords: Aneurysym, cardiac anomaly, fetal heart, left ventricle

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OP-06 Umbilical cord torsion

Sibel Mutlu[1], Koray Özbay[2]
[1]Medical Park Hospital, Department of Obstetrics and Gynecology, Gebze, Türkiye
[2] Yüzyıl Hospital, Department of Obstetrics and Gynecology, Gebze, Türkiye

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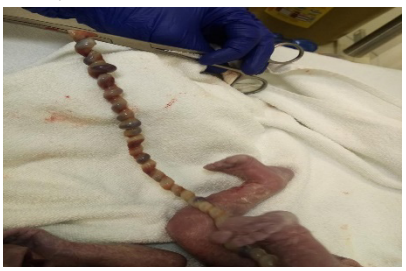
Objective: Our aim was to present 3 cases of umbilical cord torsion during pregnancy.

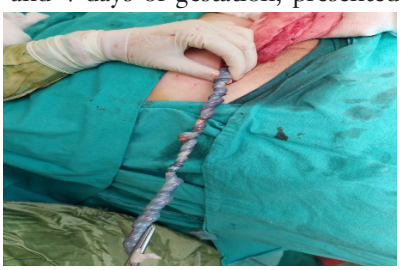
Methods: We detected 3 cases of umbilical cord torsion in the period covering 2022 and 2023 in our clinic. The data and information of these cases were obtained retrospectively from hard copy files and electronic records.

Cases: In all three cases, the main complaint was related to fetal movements.

1st case: A 25-year-old gravida 1 woman at the 32nd week of gestation admitted to our clinic with the complaint of decreased fetal movements. Oligohydramnios and decelarations on nonstress test were the main findings. Fetal biophysical profile score was determined as 2 (only fetal tone was 2 points). As a result of emergency cesarean section, a fetus weighing 1850 grams was delivered with an Apgar score of 4 at the 1st minute. He was discharged in good health after 1 month in the neonatal intensive care unit. (Figure 1)



2nd case: A 30-year-old gravida 2 woman at the 36 weeks and 4 days of gestation, presented to our clinic with the complaint of decreased fetal movements. On ultrasonographic evaluation estimated fetal weight was consistent with 33 weeks and 2 days which led us to a diagnosis of fetal growth retardation. Oligohydramnios was present and the nonstress test was found to be non-reactive. Fetal biophysical profile score was getting 2 points only from fetal breathing movements. Emergency cesarean section was performed and a fetus weighing 1920 grams was delivered with an Apgar score of 8 at the 1st minute. (Figure 2)



3rd case: A 31-year-old gravida 1 woman at the 37 weeks and 3 days of gestation admitted to our clinic with the complaint of not feeling fetal movements. Estimated fetal weight was consistent with 37 weeks and 5 days and amniotic fluid index was normal on ultrasound examination, however intrauterine fetal death was detected. Nonstress test was reactive 1 week ago. 3300 gram ex fetus was delivered vaginally. (Figure 3)

Discussion: Umbilical cord torsion describes excessive twisting in any part of the cord. Cord torsion may cause fetal growth retardation, oligohydramnios and hypoxia by causing impaired blood flow, however sometimes it can cause fetal death by obstructing fetoplacental blood flow. [1, 2, 3]In line with the literature, we detected oligohydramnios in two cases, fetal growth retardation in one case and intrauterine fetal death in one case.

Multiparity, longer umbilical cord and maternal age ≥ 35 years have been reported as risk factors for cord torsion. The incidences of fetal distress, fetal heart rate abnormalities during labor, meconium stained amniotic fluid, cesarean deliveries, instrumental vaginal deliveries and emergency cesarean deliveries were significantly higher in patients with cord torsion. [2] In accordance with the literature information, fetal distress findings were found in the nonstress test in two of our cases and their deliveries were performed by emergency cesarean section. Since cord torsion effects blood flow and abnormal coiling (hypocoiling is associated with decreased flow indices in the umbilical vein, while hypercoiling coiling is associated with a pulsatile pattern of the umbilical venous flow velocity waveforms) can result in fetal growth restriction and fetal demise, we think that Doppler evaluation of umbilical artery and middle cerebral artery blood flow and evaluation of umbilical coiling index in the third trimester may be effective in preventing adverse obstetric results. [2, 4]

Conclusion: As seen in our case series, decreased or abscent fetal movements are the main symptoms of cord torsion, and fetal biophysical profile score is an useful and easy way of detecting a compromised fetus. In case of decreased fetal movements, the well-being of the fetus should be evaluated in detail and cord torsion should be considered.

Keywords: Fetal distress, fetal well-being umblical kord, torsion

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OP-07 Prenatal diagnosis of Pfeiffer Syndrome case report

Aydın Öcal[1], Sinem Tekin[1]
[1] University of Health Sciences, Haseki Training and Research Hospital, Sultangazi, Istanbul, Türkiye
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Objective: Our purpose was to describe and compare the cranial and extracranial abnormalities of Pfeiffer syndrome on prenatal imaging with postmortem findings.

Case: A healty 23-year-old expectant mother, nulliparous referred to our perinatology clinic for sonographic abnormalities in 19-week gestation. The cranial examination on fetal ultrasonography; The fetal sagittal suture was narrow. Its coronal and lambdoid sutures were nearly closed (Figure 1). We recorded severe ocular proptosis and hypertelorism. The lids were everted everted which is often seen in the more severe forms of Pfeiffer syndrome. We observed pes equinovarus on feet and the broad great toe. The patient was offered the option of termination but the patient and her husband refused. The patient was admitted in 27 weeks old to the emergency department. On ultrasound examination, the fetus was mort in the uterus and taken to delivery. Postnatal fetal examination revealed cloverleaf skull, ocular proptosis, flat midface and nose, clubfeet, broad great toe (Figure 2). FGFR2 gene sequence analysis, c.1019A>G (p.Tyr340Cys) missense variant (rs1554928884 ClinVar: 449398) was detected in heterozygous form. The genetic result supports our clinical findings of Pfeiffer syndrome.

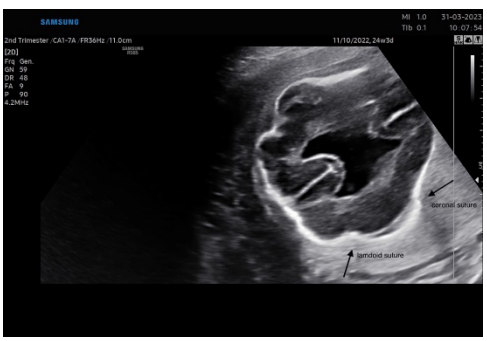

Fig 1. The shape of the skull was turricephaly suggestive of craniosynostosis and is also called cloverleaf-shaped cranium.

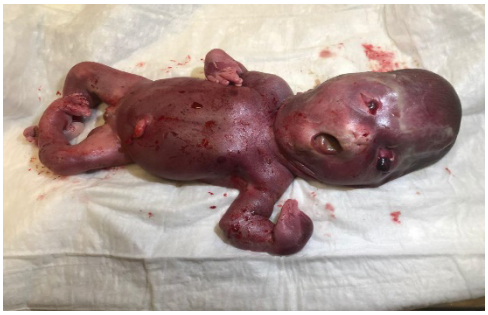

Fig 2. Cloverleaf skull, ocular proptosis, Clubfeet, broad great toe

Conclusion: Pfeiffer syndrome is a rare genetic disorder with a very poor prognosis because of the many complications. Prenatal diagnosis of this syndrome remains difficult and is based on fetal ultrasonography exploring the head, face and extremities, with a molecular biology analysis.

Keywords: Cloverleaf skull, pfeiffer syndrome, prenatal diagnosis, ultrasound, proptosis

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OP-08 The effect of maternal metabolic factors and lipid profile on birth weight in pregnants with gestational diabetes and normal glucose tolerance

Lutfiye Uygur[1]
[1]Health Sciences University, Zeynep Kamil Women and Children Diseases Reseach Hospital, Department of Obstetrics and Gynecology, Division of Perinatology, Istanbul, Türkiye
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Objective: Gestational diabetes is correlated with metabolic disorders like, obesity, insulin resistance, hyperlipidemia, and hypertension.[1] The physiological changes providing the accumulation of maternal serum content towards the fetus to support its growth mimick the metabolic syndrome, and they are exaggerated in women with gestational diabetes.[2] This study aimed to investigate the impact of maternal metabolic syndrome parameters and lipid profiles on intrauterine fetal development in pregnancies with gestational diabetes and with normal glucose tolerance. The second aim was to compare the metabolic profiles of pregnant women with GDM and those with normal glucose tolerance.

Methods: Pregnant women who applied for an oral glucose tolerance test were examined for metabolic syndrome between 24th-28th weeks. The group diagnosed with gestational diabetes and those with normal