course in the I and II trimester, who developed late preeclampsia in the III trimester.

Methods: At the first stage, we prospectively examined 167 women with a physiological course of pregnancy in the I, II, III trimester, however, 104 women (n=63; the main group) were excluded from the study (acute respiratory infections, premature birth, acute pyelonephritis, gestational diabetes mellitus, preeclampsia). In these women, we examined the levels of ADAMTS-13 antigen, vWF antigen and the ADAMTS-13/vWF axis and performed a comparative analysis of the indicators between pregnant women with a physiological course of pregnancy (n=63; the main group) in the I, II and III trimesters of gestation and healthy non-pregnant women (n=45; the control group). At the second stage of the study, a comparative analysis of ADAMTS-13 indicators was carried out ADAMTS-13:Ag, vWF:Ag and axis ADAMTS-13:Ag/vWF:Ag between patients with a physiological course of pregnancy in the I, II, III trimester (n= 63) and in patients with a physiological course of pregnancy in the I, II, trimester who developed preeclampsia after 34 weeks of gestation (n=15; the comparison group).

Results: The average age in women with physiological pregnancy was 28.5±4.64 years (the main group), in patients with advanced late preeclampsia 29.2±6.24 years (comparison group)., in the control group 28.3±5.83 years. At the first stage of the study, we found out that starting from the second trimester of physiological pregnancy in the normal, the level of ADAMTS-13:Ag decreases and the level of vWF:Ag increases. The decrease in the level of ADAMTS-13:Ag in the second trimester was by 13% (0.855 [0.726; 0.92] U/ml), compared with the control group (0.909 [0.886; 1.00] U/ml) and by 17% in the third trimester (0.787 [0.72; 0.89]U/ml). We also revealed a decrease in the axis ADAMTS-13:Ag/vWF:Ag by 50% in the second trimester and by 59% in the third trimester. At the second stage of the study, when examining the ADAMTS-13:Ag/vWF:Ag, it was found that in the main group, the median of this indicator was 0.976 [0.895;1.09], and in the comparison group 0.573 [0.486;0.696] ($p<0.01$). A 13.3% decrease in the ADAMTS-13:Ag axis was revealed/vWF:Ag in the first trimester in patients who developed preeclampsia in the future. The area under the ROC curve corresponding to the relationship between the development of preeclampsia and the level of ADAMTS-13:Ag/vWF:Ag was 0.952. The threshold value of ADAMTS-13:Ag/vWF:Ag at the cut-off point equal to 0.587 U/ml. If the ADAMTS 13:Ag/vWF:Ag level is equal to or lower than this value, a high risk of developing preeclampsia is predicted in the first trimester. Median ADAMTS-13:Ag/vWF:Ag in patients with preeclampsia in the second trimester was 0.269 [0.218-0.356], and in the third trimester 0.154 [0.131-0.200] , compared with pregnant women whose pregnancy was physiologically 0.557 [0.475-0.631] (II trimester) and 0.447[0.394-0.48] (III trimester).

Conclusion: Our study shows the normal functioning of the ADAMTS-13:Ag/vWF:Ag in healthy pregnant women in the I, II, and III trimesters. This is important to know, since a violation of this axis may indicate the development of possible pregnancy complications. Further research on this subject should be a priority for the obstetrics.

Keywords: ADAMTS-13, von Willebrand Factor, normal pregnancy, preeclampsia, ADAMTS-13:Ag/vWF:Ag

PP-032 Single umbilical artery and supernumerary vessels in the umbilical cord: a review of fetal and pregnancy outcomes

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Objective: The umbilical cord, comprising three vital blood vessels, serves as the lifeline between mother and fetus, facilitating nutrient exchange and waste removal crucial for fetal development. Prenatal care emphasizes detailed ultrasound examinations of the umbilical cord and postnatal inspections of the placenta and cord to preemptively address potential complications and safeguard maternal and neonatal well-being. Research confirms the correlation between a solitary umbilical artery and adverse perinatal outcomes, including mortality and congenital anomalies. Conversely, the impact of additional vessels remains uncertain, necessitating further investigation. This review is dedicated to enhancing our understanding and refining diagnostic and therapeutic approaches in prenatal healthcare. The objective is to identify knowledge gaps and propose evidence-based solutions to improve care for pregnant women and their unborn babies, aiming for better outcomes in prenatal healthcare practices.

Methods: An initial systematic exploration of databases such as Medline, PubMed, and Scopus was undertaken. Publications without a limit in the timeframe were selected. The following set of search terms were included: Pathological number of vessels in the umbilical cord OR

Single umbilical artery OR Four vessels umbilical cord AND Perinatal outcomes OR Fetal malformations OR Chromosomal abnormalities (Title/Abstract). Following the removal of duplicate entries, the authors proceeded with a preliminary review of titles and abstracts to evaluate their alignment with the review's objectives. This preliminary phase involved sifting through titles and abstracts, culminating in the selection of 21 pertinent articles. These chosen studie s form the bedrock of a narrative review designed to dissect and elucidate the nuanced impacts that anomalies in umbilical cord vessel count exert on perinatal outcomes.

Results: The presence of a single umbilical artery (SUA) in prenatal diagnosis may signify potential risks for fetal anomalies and adverse pregnancy outcomes such as hemodynamic instability, ischemia, and increased likelihood of intrauterine growth restriction (IUGR). Despite SUA is associated with certain complications such as prolonged NICU stay and impaired fetal growth, the significance of these risks may vary depending on the individual case. Additionally, even the presence of supernumerary vessels may be associated with fetal malformations.

Conclusion: Serial fetal evaluations, including ultrasound examinations and Doppler studies, are recommended for detecting anomalies and monitoring fetal growth throughout pregnancy. Despite the generally benign nature of isolated SUA and supernumerary vessels, close monitoring and comprehensive prenatal care are essential to ensure optimal outcomes for both mother and baby. This involves vigilant prenatal screening, postnatal examinations, and appropriate management strategies tailored to each unique case.

Keywords: Umbilical cord, supernumerary vessels, single umbilical artery, chromosomal abnormalities, fetal malformations

PP-033 The Atrioventricular complete heart block diagnosed on the preoperative routine test for caesarian section

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Objective: The management of women presenting with with complete heart block during pregnancy remains very challenging. Untill now, there is not an established consensus for the most appropriate anaesthetic technique for caesarean section in women with complete atrioventricular block.

Methods: On our case, the atrioventricular complete heart block was diagnosed on the preoperative routine test for Caesarian Section due to cephalo-pelvic disproportion. The patient had no rregular antenatal check ups at a local hospital. Her parents reported rare episodes of syncope during childhood and adolescence and one more episode two year before. During pregnancy she did not report any sincope episode except from being tired .

Results: For obstetric reasons caesarean section was performed successfully under spinal anaesthesia with continuous monitorization during intraoperative time without a pacemaker .Even though the patient reacted well during administration of atropine a temporary pacemaker was found to be in case we would need it. A healthy baby boy of 3350 gram was delivered. During postpartum period the patient did not have any complains or syncope episodes. It was strongly recommended to her a regular follow up to cardiology department.

Conclusion: As suggested by our case, asymptomatic atrioventricular complete heart block in pregnancy can be managed successfully without pacemaker. However, careful monitoring, is necessity by the pregnancy heart team with a cardiologist, anaesthetist and obstetrician, with experience in the management of high risk pregnancies. Management of the risk for cardiovascular and obstetrical complications is difficult in pregnant women with complete heart block. Asymptomatic complete heart block in late pregnancy should be managed without pacemaker by the pregnancy heart team with a cardiologist, anaesthetist and obstetrician, with experience in the management of high risk pregnancies.

Keywords: Pregnanacy, complete atrio ventricular heart block,temporary pacing,obstetrical complication

PP-034 The Contribution of molecular cytogenetics to diagnosis and genetic counseling of microdeletional syndromes in neonatal period

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Objective: Microdeletional syndromes are rare genetic pathologies, defined as the presence of loss of small chromosomal fragments (< 5 megabases), not visible on a standard karyotype. These microdeletions are