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Oral Presentations

(0-01 – 0-05)

0-01

Importance of the implementation of cervicometry as universal screening in the public health system in the Dominican Republic

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Objective: Determining of importance of the implementation of cervicometry as universal screening in the public health system in the Dominican Republic.

Methods: Observational, descriptive, retrospective, cross-sectional design. The group of cases was delimited from the estimation of the cervical length with the technique proposed by the International Society of Ultrasound of Obstetrics and Gynecology (ISUOG). The following characteristics were evaluated: cervical length (CL), endocervical glandular echo, cervical length cut-off point.

Results: The universe consisted of 1496 patients, of these 194 were premature, which corresponds to 13%. Of the 554 patients studied in the Maternal Fetal Medicine Unit, the inclusion criteria were met for 61 cases. The most frequent age group was between 20 and 25 years old. The mean cervical length in was 26.7 mm with a standard deviation of 8.7 mm. Women with spontaneous preterm deliveries had shorter transvaginal cervical length measurements, p=.000, OR: 38, 95% CI: 8.05–179.2. The non-visualization of the glandular echo was observed a relationship with preterm delivery in 16%, p=.001, OR: 31.6, CI: 95%: (3.6–273.4).

Conclusion: The cervical length and the absence of glandular echo were significantly associated with the occurrence of spontaneous preterm delivery; mean cervical length was significantly shorter in patients who delivered preterm; a short cervix detected by transvaginal sonography is an independent predictor of preterm delivery; a cervical length ≤20 mm) and ≤15 mm provides a higher positive predictive value for spontaneous preterm delivery

Keywords: Cervical length, endocervical glandular echo, premature labor.

0-02

Robson classification of cesarean section in North Macedonia: current trends

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Objective: To implement the 10-group Robson classification model and to reduce the number of unnecessary cesarean section deliveries and still to have a good maternal and neonatal outcome.

Methods: This study was realized at the University Clinic for Gynecology and Obstetrics in Skopje, North Macedonia. It is a retrospective study where two years were analyzed and compared.

Results: The rate of cesarean sections for 2017 was 38.5% and for 2019 42.6%. Categorization of deliveries according to Robson criteria showed a different rate of cesarean section for each subgroup.The analysis has shown that group 5 had the largest number of cesarean section deliveries in both years (82.5% in 2017 and 87% in 2019); these were patients with previous cesarean sections. They were followed by group 1 and 2, or pri¬mi-para with spontaneous onset and induced delivery. Groups 6-9 are the smallest but have the highest percentage of cesarean sections (81.3%, 80.9%, 76.9% and 98.2% for 2017 year and 95%.87%, 87.1 and 98.2 for 2019 accordingly).

Conclusion: The implementation of the Robson classi¬fication in most countries has shown a reduction in the number of cesarean deliveries and thus a reduction in overall maternal and neonatal morbidity and mortality. The goal of Robson clasification is to identify the target groups that contribute most in the percentage of cesarean sections and to act on these target groups through appropriate education and training.

Keywords: Cesarean section, groups, Robson classification.

0-03

History-indicated vs ultrasound-indicated cerclage in women with a history of preterm birth

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Objective: To compare the rate of preterm birth at <28, <34 and <37 weeks in women with a history of preterm birth and a history indicated cerclage (HIC) vs an ultrasound indicated cerclage (UIC).

Methods: Retrospective cohort study on women with singleton gestations and a McDonald's cerclage performed in our institution between 2007 and 2020. Women with a history of >2 preterm births or one second-trimester loss were offered either a history-indicated cerclage or cervical length biweekly screening from 15–16 weeks and UIC if the cervical length shortened <25 mm. Basal characteristics, cerclage-associated complications and preterm birth rates were compared among groups. Statistical comparisons between groups were made using the corresponding tests for qualitative variables (Chi-square or Fisher's exact test) and quantitative variables (ANOVA, Kruskal-Wallis). Preterm birth rates were evaluated as well after adjusting for prior obstetric history through logistic regression. Differences with a p-value <0.05 in two-tailed distributions were considered statistically significant.

Results: There were 131 women who underwent HIC and 152 an UIC. The median [interquartile range (IQR)] gestational age at cerclage was 13.9 (1.2) vs 20.8 (6.3) weeks, with a cervical length of 34 (18) mm vs 18 (12) mm in HIC vs UIC. Regarding obstetric history the median second trimester losses were 1 (2) vs 0 (1) and preterm births 0 (1) vs 0 (1) preterm births in HIC vs UIC, respectively. None of these differences were statistically significant except for second trimester losses ($p<0.01$). The median gestational age at delivery was 37.9 (4.9) vs 38.0 (3.2) weeks for HIC and UIC and preterm birth rates <28, <34 and <37 weeks were 13.7% 22.1% 36.7% and 9.2% 15.1% 34.9% for HIC and UIC, respectively. The cerclage associated complications amounted to 4.6% and 5.3% in HIC and UIC, p=0.78, mainly being rupture of membranes or uterine contractions. There were 31.3% and 29.7% women who had preterm rupture of membranes beyond 2 weeks of cervical cerclage and therefore was not considered associated to the technique. After adjusting for prior obstetric history, the risk of preterm birth was the same for both HIC and UIC at <28 (p=0.64), <34 (p=0.28) and <37 (p=0.20) weeks.

Conclusion: Cervical length screening and UIC is a safe option in women with history of preterm birth, with perinatal results comparable to those with an early HIC. This approach may minimize the need for unnecessary cerclage and its associated risks in those women who do not shorten the cervix.

Keywords: Preterm birth, cerclage, prevention, ultrasound, cervical length.

0-04

Physical-exam indicated cerclage. Perinatal outcomes and prognostic markers

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Objective: To evaluate perinatal results as well as prognostic markers of time-to-delivery in physical-exam indicated cerclage.

Methods: Retrospective cohort study on women with singleton gestations and a physical-exam cerclage performed in our institution between 2010 and 2020. In absence of clinical or analytical signs of infection or uterine contractions, women with dilated cervix and exposed membranes were offered to undergo a physical-exam cerclage using McDonald's technique between 16 and 27 weeks. A descriptive analysis was per-

formed and dichotomized according to preterm birth <28 and 34 weeks. Statistical comparisons between groups were made using the corresponding tests for qualitative variables (Chi-square or Fisher's exact test) and quantitative variables (ANOVA, Kruskal-Wallis). Those with p<0.10 were included in logistic regression analysis for preterm birth <28 and 38 weeks and those with a p-value <0.05 in two-tailed distributions were considered statistically significant.

Results: A total of 45 women underwent a physical-exam cerclage at a median [interquartile range (IQR)] gestational age of 21.8 (3) weeks and a cervical length of 5 (3) mm. The median (IQR) time until delivery was 83 (70) days with preterm birth rates <28 and <34 weeks of 28.9% and 55.6%. There was a 8.9% of perinatal death (6.7% intrauterine and 2.2% neonatal). The median (IQR) birthweight was 1932 (2400) g, 7.1% had an Apgar score <7 and there were no case of neonatal sepsis. Women with delivery <34 weeks had an earlier gestational age at cerclage when compared to those who delivered after (21.1 vs 22.7 weeks, p=0.03) and no statistical significant differences on terms of biochemistry (Reactive C Protein mg/dL 0.57 vs 0.46, p=0.22) or cell blood count. (leukocytes/uL 9500 vs 10,000, p=0.21; neutrophile 74% vs 77%, p=0.35). However, when considering clinically significant cut-offs, women with earlier delivery had higher rates of leukocytes >12,000/uL (61% vs 28%, p=0.03). When modelled on logistic regression, only leukocyte count >12,000 (OR 16.1 95% confidence interval 1.12–218.3) remained as significant predictor of delivery <28 weeks. Leukocyte count >12,000 was significantly associated to a reduction in time-to-delivery (36.5 vs 91 days, p=0.03), higher rates of neonates with a birthweight <1500 g (47.1% vs 17.9%, p=0.04) and a non-significant trend of higher perinatal mortality (47.1% vs 21%, p=0.06).

Conclusion: Physical exam cerclage is a safe technique that can prolong pregnancy in critical situations a median of 11 weeks and over 2/3 of women will reach a gestational age over 28 weeks. The earlier the gestational age and higher leukocyte count the poorer the prognosis. Women with a leukocyte count over 12,000/uL have their latency time halved and should be informed of this poorer prognosis.

Keywords: Preterm birth, cerclage, prevention, ultrasound, cervical length.

0-05

Perinatal results in early-onset fetal growth restriction and prediction of adverse outcome

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Objective: To evaluate perinatal results as well as prognostic markers of adverse outcome in fetuses with a diagnosis of early-onset fetal growth restriction (eoFGR) of placental origin.

Methods: Retrospective cohort study on women with a diagnosis of eoFGR in singleton gestations evaluated in our institution between 2014 and 2021. A descriptive analysis of demographic and basal characteristics at diagnosis was performed and dichotomized according to the development of an adverse outcome. Adverse outcome was considered a composite of perinatal death, bronchopulmonary dysplasia, necrotizing enterocolitis, intraventricular grade III or IV hemorrhage and periventricular leukomalacia. Statistical comparisons between groups were made using the corresponding tests for qualitative variables (Chi-square or Fisher's exact test) and quantitative variables (ANOVA, Kruskal-Wallis). Those with p<0.10 were included in logistic regression analysis and those with a p-value <0.05 in two-tailed distributions were considered statistically significant.

Results: A total of 210 cases of eoFGR were evaluated, of which 26.2% developed an adverse outcome (including a rate of perinatal mortality of 11.9%). At diagnosis, the median [interquartile range (IQR)] gestational age was of 27 (3.8) weeks, estimated fetal weight of 729 (457) g and sFlt-1/PlGF 193 (427). With a median PlGF ratio of 40 with a stable distribution across gestational ages. Among live-born fetuses (n=193), there were 13.5% cases with bronchopulmonary dysplasia, 0.5% with necrotizing enterocolitis, 1% of grade III-IV intraventricular hemorrhage and 0.5% of periventricular leukomalacia. A description of the main basal characteristics dichotomized by adverse outcome is presented in Table 1. As shown, fetuses with an adverse outcome had a lower gestational age at diagnosis, lower estimated fetal weight, higher umbilical artery and mean uterine arteries pulstatility index, higher rates of stage II, III and IV and a more altered angiogenesis biomarker profile. On the logistic regression model, estimated fetal weight, umbilical artery pulstatility index and PlGF dichotomized <40 at diagnosis were significant predictors of adverse outcome with an odds ratio (95% confidence interval) of 0.99 (0.99–0.99), 1.91 (1.08–3.41) and 2.30 (1.07–4.93), respectively. However, when dichotomizing PlGF values below the first quartile these differences were not significant.

Conclusion: eoFGR remains an entity with high morbidity and mortality. The main prognostic factors for perinatal adverse ouctome are estimated fetal weight, FGR stage and PlGF. However, the additional value of EFW is marginal Angiogenesis biomarkers can act as a subrogate marker of placental dysfunction, where a low PlGF increases the chance

of an adverse outcome. There were no differences when stratifying for extremely low PlGF values, suggesting that there is a lower limit from which outcomes remain the same. Women with PlGF <40 pg/mL at diagnosis of eoFGR are at an increased risk of adverse perinatal outcome. This information can be of use when offering parental counselling

Keywords: Fetal growth restriction, placental dysfunction, perinatal outcome, angiogenesis biomarkers, prediction.

Table 1 (O-05). Basal fetal characteristics stratified by development of an adverse outcome.

Characteristic	Non-adverse outcome (n=146)	Adverse outcome (n=64)	p-value
Gestational age at diagnosis (weeks), median (IQR)	28.1 (26.3–29.7)	25.6 (23.6–26.9)	<0.001
Preeclampsia at diagnosis	66 (35.7)	5 (20.0)	0.464
Estimated fetal weight (g)	825 (656–1113)	531 (364–700)	<0.001
Mean uterine artery PI	1.6±0.6	1.9±0.6	<0.001
Umbilical artery PI	1.6±0.6	2.0±1.4	<0.001
Cerebro-placental ratio	1.3±0.3	1.0±0.4	<0.001
Stage* FGR			
I	136 (93.2)	58 (90–6)	0.434
II	7 (4.8)	2 (3.1)	
III	2 (1.4)	3 (7.7)	
IV	1 (0.7)	1 (2.6)	
sFlt-1/PlGF	121 (21–440)	256 (192–555)	<0.001
sFlt-1	5535 (2283–12,829)	7044 (5541–10,982)	0.068
PlGF	49 (28–100)	27 (18–41)	<0.001

Results are presented as median (interquartile range) and n (%). **PI:** pulstatility index.*Stage I, antegrade umbilical flow; stage II, absent end-diastolic umbilical artery flow; stage III, reversed end-diastolic umbilical artery flow; stage IV, reversed a wave on ductus venosus or unprovoked decelerations on CTG.

Poster Presentations
(PP-01 – PP-30)

PP-01

First-trimester preeclampsia screening in a low resources population

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Objective: Hypertension diseases are the first cause of maternal mortality in Argentina. Preeclampsia is a public health problem with severe maternal, fetal, and neonatal complications. Many strategists detect pregnancies with a high risk of preeclampsia and apply primary prevention using aspirin. The aim of this presentation was to apply the combined screening for the first time in our low resources population.

Methods: It was a prospective cohort, by consecutive sampling, that included women with single pregnancy referred between 11th and 14th weeks. We registered medical history (age, parity, previous diseases, preeclampsia history), maternal weight, mean arterial pressure (MAP), take a blood sample for maternal serum pregnancy-associated plasma protein A and make a morphologic ultrasound (nuchal translucency, nasal bone, ductus venosus, fetal anatomy) with uterine-arteries mean pulsatility index. We measured weight and height and used an Omron device to measure arterial pressure in both arms. The ultrasound device was an Esaote MyLab 40. The blood samples were processed by the quimioluminicense method with Maglumi 800- SNIBE device. The preeclampsia risk was calculated by Fetal Medicine Foundation 2012 program. It was indicated a low dose of aspirin (100 mg/day) to all high-risk patients (more than 1/150). All patients had an appointment at 20th week for arterial pressure control, morphologic ultrasound, uterine-arteries mean pulsatility index and 24-hours proteinuria. If a patient had hypertension (more than 140/90 mmHg), uterine-arteries mean pulsatility index more than 90 percentile, intrauterine fetal growth restriction or 24hs-proteinuria more than 300 mg, she was re-categorized as high risk for preeclampsia pregnancy. All the high-risk patients were scheduled at 24, 28, 32, and 36 weeks to obstetric and fetal growth controls. We did the same with low-risk patients at 32 and 36 weeks. We registered gestational age at delivery, neonatal weight and maternal complications for all patients included. There was no conflict of interest to carry out this work.

Results: Sixty patients were included. The mean age was 28.4 years, 36.7% were nulliparous and 55% had overweight or obesity. Other risk factors were: 10% chronic hypertension, 3.33% smoker, 1.66% previous preeclampsia, and 10% mother with preeclampsia. There were 3 spontaneous miscarriages and one lost to follow-up. After first-trimester preeclampsia screening, 13 (23.21%) women were classified as high-risk (we indicated them low-dose aspirin) and 43 were low-risk (76.79%). At de second trimester control, 4 patients were re-categorized as high-risk for preeclampsia. All the high-risk patients (n=17, 30.35%) had control at 24, 28, 32, and 36 weeks. Preeclampsia was diagnosed in 3 patients: one of them a first-trimester high-risk woman and the others re-classified at the second trimester. All the patients had deliveries at term, with appropriate weight for gestational age, and no complications as HELLP syndrome or eclampsia were diagnosed. There was no preeclampsia diagnosis in the low-risk patients.

Conclusion: we applied the combined screening in a small sample of our population to detect de "patient target" to aspirin and to do a closer control. We gave aspirin to 23.21% of the sample and only one patient had preeclampsia. All the patients had deliveries at term, with appropriate weight for gestational age, and no complications as HELLP syndrome or eclampsia were diagnosed. There was no preeclampsia diagnosis in the low-risk patients. If we had used only risk factors to give aspirin, we had overmedicated patients because our population has many of them. This was an expensive test because of the biochemistry part, but we can use only risk factors, MAP and uterine-arteries mean pulsatility index to improve patient selection.

Keywords: Screening, preeclampsia, first-trimester.

PP-02

Intrauterine fetal death secondary to furcate umbilical cord insertion. Report of a case and review of the literature

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Objective: Document a case of fetal demise secondary to furcate umbilical cord insertion and review related literature.

Methods: We made a search in PubMed, Cochrane Library, Science Direct and OVID databases. Keywords utilized were (Mesh): intrauterine fetal demise, fetal death, furcate ubilical cord insertion, placentary anomalies, prenatal diagnosis, placental diseases, perinatal complications, umbilical cord pathology, prenatal ultrasonography. A total of 17 articles were selected due to their relevance to our case.

Case: This is the case of a 29 year old, woman, in her first pregnancy with an uneventful 40.3 week old pregnancy. She reports diminished fetal movements, ultrasound confirms fetal demise. Pregnancy is interrupted, placenta and membranes are sent for pathology evaluation, reporting furcate cord insertion.

Conclusion: Furcate umbilical cord insertion is a rare anomaly associated to perinatal death. Diagnosis should be confirmed by histopathology. Diminished fetal movements is an important clinical sign, indicating fetal compromise. This is a case of fetal demise associated to placental insufficiency and not a traumatic event as reported in other publications. An ultrasonographic evaluation in a suspicious case, should make a thorough evaluation of the cord to evaluate these malformations.

Keywords: Intrauterine fetal demise, fetal death, furcate ubilical cord insertion, placentary anomalies, prenatal diagnosis, placental diseases, perinatal complications, umbilical cord pathology, prenatal ultrasonography.

PP-03

Villoglandular-type adenocarcinoma of the cervix during pregnancy: a case report

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Objective: About 1% to 3% of cervical cancers are diagnosed during pregnancy, or in the first 12 months postpartum. Whether or not pregnancy is capable of accelerating cancer progression is still controversial. Villoglandular adenocarcinoma of the cervix, (VGA) is rare, it usually presents at younger ages than other adenocarcinomas, with a higher incidence around 30 years of age, and with a favorable prognosis. It has little capacity to generate distant metastases, and does not usually associate with vascular or lymphatic involvement. We present the case of a pregnant patient diagnosed with villoglandular adenocarcinoma of the cervix.

Case: Diagnosis is made at week 34 of pregnancy, confirmed by colposcopy biopsy. It was decided to terminate the pregnancy at week 35 of gestational age, by cesarean section with radical hysterectomy and lymphadenectomy. The surgery was carried out without incidents, and the patient was discharged with good clinical evolution.

Conclusion: Villoglandular adenocarcinoma of the cervix corresponds to a well-differentiated variant of cervical adenocarcinoma, with a good prognosis. Few cases have been reported in pregnant patients, usually presenting as macroscopically polypoid or papillary cervical masses. Treatment can range from surgical conization, trachelectomy or even hysterectomy. As reviewed in literature, the majority of cases associated with pregnancy were treated by performing a cesarean section followed by radical hysterectomy. We present the case of diagnosis in a patient with a 34-week gestation, with surgical resolution.

Keywords: Adenocarcinoma, cervical cancer, villoglandular adenocarcinoma, pregnancy, cancer in pregnancy.

PP-04

A snapshot on practices and trends on vitamin K prophylaxis in term neonates in the Dutch speaking part of Belgium (Flanders)

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Objective: Vitamin K prophylaxis in neonates is relevant to reduce vitamin K deficient bleeding, but practices vary on route of administration, dosing, and repated dosing during breastfeeding. We intended to document current practices in Flanders as an update of the VVK guideline is planned.

Methods: Following ethics approval (MP016741, KU Leuven), and supported by the VVK secretary, an online questionnaire circulated (Q1/2021) to all heads of the relevant departments (paediatrics, neonatology), with an additional search on midwifery units. The questionnaire focused on the current practices on vitamin K prophylaxis in term cases and on recent changes in practices, and collected information on experiences with parental refusal.

Results: Responses from 56/59 Flemish maternities and 17/30 midwifery units that do home deliveries unveiled relevant variability. About 50% of maternities use the intramuscular (1–2 mg), about 50% the oral (1–2 mg) route, with 5 different maintenance doses in breastfed infants. Nine/13 recently (<5 years) changed regimens were a switch from oral to intramuscular. Midwifery units only use oral vitamin K, with 6 different regimens. Both paediatricians and midwives reported personal experience with parental refusal of intra-

muscular (20/54 and 13/15) or any prophylaxis (11/54 and 16/16) respectively.

Conclusion: This snapshot on vitamin K prophylaxis in term neonates born in Flanders provides a contemporary and reliable overview on the diversity in practices to support the VVK guideline update.

Keywords: Vitamin K prophylaxis, oral, intramuscular.

PP-05

Association of gestational weight gain, gestational body mass index and increased maternal age with adverse perinatal outcomes

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Objective: Nutrition has a significant role in perinatal health, whereas body mass index is an indicator for measuring the nutritional status of adults. Furthermore, the picture becomes wider if we add the gestational weight gain and increased maternal age over 35. Therefore, we performed our study to evaluate the association of gestational weight gain, gestational body mass index and increased maternal age on adverse perinatal outcomes.

Methods: Our study was a retrospective, cohort study, which included 120 pregnant patients at the term of pregnancy in four months. The study was performed at the University Clinic for Gynecology and Obstetrics in Skopje, N. Macedonia. We examined the body mass index before and during pregnancy, gestational weight gain status, and maternal age. All authors have no conflict of interest in this study.

Results: The analyses showed that adverse perinatal outcomes had a significant negative association with pre-gestational and gestational body mass index, gestational weight gain, and increased maternal age (Correlation coefficient r=0.25), p=0.03, 95% Confidence interval for R=0.014 to 0.47. Maximum adverse perinatal outcomes were present in women over 35 years of age, weight gain over 16 kg, and gestational body mass index over 27.

Conclusion: In our study, we concluded that gestational body mass index, gestational weight gain, increased mother age are strongly associated with adverse perinatal outcomes. Therefore, we advise pregnant women to consult their physician or dietitian before getting pregnant. It is essential to obtain: a body mass index of 20–24, have a healthy lifestyle, regular exercises, and a healthy diet before and during pregnancy to avoid adverse perinatal outcomes as much as possible.

Keywords: Gestational weight gain, body mass index, increased maternal age, adverse perinatal outcome.

PP-06

Complicated monochorionic pregnancies in a public maternity at Buenos Aires city

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Objective: To describe the incidence of typical complications of monochorionic pregnancies treated in a fetal medicine clinic.

Methods: It is a retrospective descriptive study. All patients with monochorionic pregnancies who attended the fetal medicine clinic of Santojanni Hospital between January 2017 and December 2021 were included. The diagnosis of chorionicity was established with the T sign until week 16 and, in cases of patients with late prenatal control, with an intertwin membrane thickness of less than 2 mm. From week 16th, the patients were scheduled for control every two weeks to perform obstetric and doppler ultrasound with an evaluation of the peak systolic velocity of the middle cerebral artery (PS-MCA) to detect typical complications of monochorionic pregnancy: selective fetal growth restriction (sFGR), twin-to-twin transfusion syndrome (TTTS), twin anemia-polycythemia sequence (TAPS) or twin reversed arterial perfusion sequence (TRAP). For the diagnosis of TTTS, a maximum vertical pocket of amniotic fluid less than 2 cm in one fetus and greater than 8 cm in the other was considered, and the corresponding Quinteros stage was also established. For the diagnosis of TAPS, it was considered that in one fetus the PS-MCA should be less than 0.8 cm/second and in the other greater than 1.5 cm/second. The diagnosis of selective sFGR was made when the estimated fetal weight discordance was greater than 25% and the smaller co-twin had a weight lower than 10 percentile or increased resistance in the umbilical artery. Deaths of one or two twins after 12 weeks were also included.

Results: Between 2017 and 2021, a total of 110 patients with multiple pregnancies were assisted at the fetal medicine clinic. Fifty (45.45%) had a monochorionic placenta (45 monochorionic diamniotic pregnancies, 3 monochorionic monoamniotic pregnancies, and 2 dichorionic triamniotic pregnancies). During follow-up, at least one complication typical of monochorionic pregnancy was diagnosed in 42% of cases. Selective FGR was diagnosed in 26%, TTTS in 6%, and TAPS in 4%. In 8% of the cases, all fetuses died: one at 12.2 weeks, another at 16.2 weeks, a late abortion in a dichorionic triamniotic pregnancy with TTTS, and at 29 weeks due to type 3 sFGR. The most frequently diagnosed sFGR was type 1, in 76.9% of cases. There were no cases of TRAP. The fetal mortality rate in uncomplicated monochorionic pregnancies was 6.9% and in complicated ones 11.36%.

Conclusion: We had a high proportion of monochorionic pregnancies as well as a diagnosis of selective IUGR, compared with the bibliography. This could be because, as it is maternity with fetal medicine care and high neonatal complexity, it receives referrals from other centers in the region. A difference was observed between mortality rates in complicated and uncomplicated monochorionic pregnancies. The care of these pregnancies must be performance by qualified personnel in carrying out the studies and in the detection of complications to provide adequate follow-up and timely treatment or termination of the pregnancy.

Keywords: Twins, monochorionic.

PP-07

Conservative management of type I sacrococcygeal teratomas with or without presence of a nutritious vessel

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Objective: Diagnosis, evolution and follow-up of cases of sacrococcygeal teratoma for a timely decision of obstetric resolution without requiring prenatal therapy.

Methods: A retrospective, single center study, reviewing fetuses with diagnosis of type I sacrococcygeal theratoma in altman classification, was conducted between 2018 and 2022. All of them with sonography monitoring of cystic volume, tumor volume to fetal weigth ratio and doppler ultrasound every 2 weeks, between the 24–37 weeks of gestation.

Results: 3 fetuses were evaluated with a diagnosis of sacrococcygeal teratoma type I. 2 of them with net cystic component (2/3, 66%) and one with mixed component (1/3, 33%) in addition to the presence of doppler nutritional vessel inside. 100% of the cases (3/3) were able to reach term (37 weeks). Performing surgery on the newborn for resection of the mass at an average 5.6 days after birth (range 2–12 days), without evident signs of cardiac sequencing or compartment syndrome.

Conclusion: this study supports considering the conservative management of altman's type I sacrococcigal teratoma, in order to achieve at term delivery and postnatal surgical resolution, as there are no signs of fetal heart failure through continuous monitoring every 2 weeks from week 24 to week 36 ofgestation, regardless of the size of the tumoral cystic component.

Keywords: Sacrococcygeal teratomas, conservative management.

PP-08

Does cesarean section or preterm delivery influence TGF-B2 level in human colostrum?

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Objective: Human colostrum (HC) is a rich source of immune mediators that play a role in immune defences of a newly born infant. The mediators include transforming growth factor (TGF-β) which exists in three isoforms that regulate cellular homeostasis and inflammation, can induce or suppress immune responses, limit T helper 1 cells (Th1) reactions and stimulate secretory immunoglobulin A (IgA) production. Human milk TGF-β also decreases apoptosis of intestinal cells and suppresses macrophage cytokine expression. The aim of the study was to determine the concentration of TGF-β2 in HC obtained from the mothers who delivered vaginally (VD) or by caesarean section (CS), and to compare the concentrations in HC from mothers who delivered at term (TB) or preterm (PB).

Methods: The concentrations of TGF-β2 were measured in HC from 299 women who delivered in the 1st Department of Obstetrics and Gynaecology, Medical University of Warsaw: 192 (VD), 107 (CS), 251 (TB), and 48 (PB). In this study, 56% of preterm pregnancies were delivered via CS. The colostrum samples were collected within 5 days postpartum. TGF-β2 levels in HC were measured by the enzyme-linked immunosorbent assay (ELISA) test with the Quantikine ELISA Kit-Human TGF-2 (cat.no. SB250).

Results: Statistical significance between groups was calculated by the Student t-test using StatSoft Statistica 13 software. The mean TGF-β2 concentration in patients who delivered at term or preterm were comparable. The levels of TGF-2 in HC were higher after preterm than term being 4648 vs. 3899 ng/mL ($p = 0.1244$). The delivery via CS was associated with higher HC concentrations of TGF-2. The levels of TGF-2 were significantly higher in HC after CS than VD (7429 vs. 5240 ng/mL; $p=0.0017$).

Conclusion: The data from this study suggest: caesarean section was associated with increased levels of TGF-β2 in HC. The increased levels of TGF-β2 in HC of women who delivered prematurely require further research. Early and exclusive breast-feeding by mothers after caesarean section and premature births with colostrum containing high TGF-β2 levels may prevent the negative impact of pathogens which often colonize the gastrointestinal tract and may reduce the risk of chronic diseases in this group of patients.

Keywords: Human colostrum, human milk, immune modulators; TGF-β, cytokines; health outcomes, chronic disease, immunological outcome.

PP-09

Extragenital comorbidity as a high risk of severe COVID-19 in pregnant women with unfavorable perinatal outcome

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Objective: Comparative clinical and morphological characteristics of the «mother – patient – fetus» system from high-risk pregnancy with extragenital pathology and SARS-CoV-2 infection of mild and severe degree and without infection.

Methods: There were studied 95 placentas from women with a positive PCR test result from a nasopharyngeal swab for SARS-CoV-2 and clinical symptoms at 28 or more weeks of gestation. The control group consisted of 114 placentas from women with a negative PCR test for SARS-CoV-2 and no clinical symptoms of infectious disease. Pregnancy of high risk with extragenital pathology was registered in all cases in the study groups. Inclusion criteria: diabetes mellitus, hypertensive disorders, hypothyroidism, kidney disease, thyroid disease, asthma, autoimmune disease, coagulopathy and infection of pregnant women with COVID-19. The exclusion criteria: multiple pregnancy, chromosomal infections or malformations of newborns, acute inflammatory lesions of the placenta. Sections were subjected to standard processing and staining with hematoxylin and eosin according to the standard protocol. All cases were reviewed by two pathologists, which did not know any information on pregnancy outcomes and clinical data. Statistical analysis was performed using SPSS (v.25.00, IBM Statistics, Armonk/NY, USA).

Results: Severe SARS-CoV-2 was characterized by extragenitalpolypathy in 82.0% of cases (32 women),it was in 2.2 times more than in the group with a mild course of SARS-CoV-2 and in 2.7 times more than in the control group. Of these, the prevalence of diabetes in the group with severe SARS-CoV-2 course was 20.5% at type 1 diabetes mellitus and 23.1% at type 2 diabetes mellitus, 30.8% at chronic arterial hypertension and 41.0% at obesity. Another extragenital pathology in this group were detected in 43.5% of cases, which is in 1.4 and 1.6 times more than in the group with mild severity and in the control group, respectively. Pregnancy-related diseases (gestational diabetes mellitus and preeclampsia) were observed in 26.0% and 18.0% of cases, respectively. For a mild degree, these indices were in 18.0% and 16.0% of cases, respectively, and in the control group, gestational diabetes mellitus and preeclampsia were registered in 16.0% and 6.0% of cases, respectively. Neonatal asphyxia occurred in 38.5% of cases in the group with severe COVID-19, which is almost in 2 times more than in the group with a mild course and in the control group. The number of children with intrauterine growth retardation was 23.2% for the group with a severe course, which is in 3 times more than in the group with a mild course and 1.5 times more than in the control group. Macrosomia in groups with severe and mild course was registered 2 times more often than in the control group. Cases of antenatal death and neonatal death in the mild course group and in the control group occurred with the same frequency. In the group with a severe course, these indices were in 2.8 and 2.9 times higher. Acute hypoxic damage of the placenta was detected in 74.0% of cases in the group with severe COVID-19, it was in 2.9 and 5.3 times more than in the group with mild course and in the control group. Chronic hypoxic damage of the placenta was presented as maternal vascular malperfusion, fetal vascular malperfusion was focal and diffuse. Combined and cross-over damage of the placenta in the group with severe course was observed in 74.4% of all studied placentas, which was in 2.6 times more than in the group with mild course, and in 4.0 times more than in the control group.

Conclusion: We believe that induced by COVID-19 is a predisposing background condition and the result of adverse conditions in the antenatal period, which increases the vulnerability of the nervous and cardiovascular systems of the fetal body in postnatal life. Childbirth and the transition from intrauterine to independent existence are a stress factor for the fetus and newborn, and against the background of an existing infection in the mother, they can cause a breakdown in compensatory-adaptive processes, which leads to both episodes of sudden neonatal asphyxia and post-natal collapse of the vascular and respiratory systems. In the accordance with the results of our work, the relationship between the clinical severity of the course of the maternal condition and the condition of the fetus was revealed, which suggests that the pathophysiological mechanisms of hypoxic damage are caused by perfusion disorders on the part of the mother.

Keywords: Placenta, pregnancy, COVID-19, morphological damage.

PP-10

Heart disease in pregnancy. A descriptive study in a Colombian population from 2004 to 2008

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Objective: Heart disease in pregnancy is a serious health problem, and although its incidence ranges between 0.2–0.4%, it

can represent the leading cause of non-obstetric maternal mortality. This entity is the most frequent in Western countries; In contrast, heart diseases of rheumatic origin are the most prevalent in developing countries (5.9%). In recent years, there has been a trend towards an increase in the prevalence of heart disease in the pregnant population due to cardiovascular risk factors such as Mellitus diabetes, hypertension and obesity. Evidence shows that pregnancy and childbirth entail substantial physiological changes that require adaptation of the cardiovascular system. These changes, well tolerated in pregnant women without heart disease, expose women with cardiovascular disease to significant risks. Therefore, our objective is to describe the cases managed in 2 health institutions in Colombia (Cardiology Service of Hospital San José-Bogotá and NORFETUS Maternal-Fetal Medicine Unit-Cúcuta) and also to report their statistics.

Methods: A descriptive, retrospective study was carried out with the clinical histories of the cardiology service at the Hospital de San José and at the perinatology service of the Maternal Fetal Medicine Unit NORFETUS (Bogotá and Cúcuta respectively) from 2004 to 2008, where 66 pregnant women diagnosed with heart disease were found and met the inclusion criteria of the study.

Results: The most frequent heart diseases were: 56% congenital (37 cases), 35% acquired (23 cases) and 9% others (6 cases) (cardiac arrhythmias and peripartum cardiomyopathy were included in this group). Among the findings with the highest incidence that represented heart disease according to its cause, it was shown that septal defects were predominant in congenital heart disease, 27% corresponded to atrial septal defect (10 cases) and 22% to interventricular septal defect (8 cases); while in the group of pregnant women with acquired heart disease, the most frequent finding was the mitral valve disease with 65% (15 cases); and finally, the most frequent finding in the group of other disorders was arrhythmias, which represented 83% (5 cases). It was found that the age group of mothers with the highest frequency of heart disease ranges from 16 to 25 years, representing 43% (29 cases). Parity was another relevant finding since 33 cases (50%) corresponded to primiparous mothers, 17 cases (25.75%) to second pregnant women and 16 multi-pregnant cases (24.2%). Among pregnant women with heart disease, the percentage of prematurity was 49% (31 cases); 50% of the neonates weighed between 2.500 and 3.500 grams. Despite this, 90% of the neonates obtained a score >7 on the Apgar test and only 2 cases of neonatal mortality (5%) were found. The predominant route of delivery was cesarean section 70% (46 cases), followed by 24% for vaginal delivery; gestational loss occurred in 4 cases (6%), a figure that turned out to be much lower than the reviews reported in the international literature. Regarding surgical management, 19.7% (13 cases) required prenatal intervention, while 4.55% of pregnant women underwent surgery during pregnancy (3 cases).

Conclusion: Heart disease in pregnancy represents a great problem for the pregnant woman and the fetus; according to the risk classification, it can even result in maternal death and/or the mother-fetus binomial. The most frequent heart diseases found in our study population were septal defects 27% (18 cases) and mitral-aortic valve disease 37.9% (25 cases of the total). Despite the maternal-fetal risks of heart disease associated with pregnancy, it was shown that the rate of complications is low and the most predominant pathologies allow the pregnancy to be carried to a successful term.

Keywords: Pregnancy, congenital heart disease, acquired heart disease.

PP-11

Hypothalamic hamartoma in a newborn: prenatal diagnosis

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Objective: To present a clinical case of a newborn with a brain tumor.

Case: A 28-year-old patient, with no significant personal birth history, with a history of pregnancy and a previous abortion. Early capture pregnancy, well controlled. Normal first trimester routines and normal first trimester combined screening, with low risk for chromosomal abnormalities Morphostructural ultrasound in the second trimester of pregnancy highlights the presence of micrognathia, right microphthalmia and a solid homogeneous image of 26×19 mm at the brain level. The following studies were carried out: Neurosonography showed a solid intracranial image at the supratentorial thalamic level that displaced the midline and caused a 12 mm dilatation of the left lateral ventricle. The anterior horns are not visualized, nor the cavum of the septum pellucidum, (CSP). Fetal echocardiogram detected a congenital heart disease with an enlarged IVC with transposition of the great vessels. Normal amniotic fluid karyotype, 46 XX. In neurosonography and control ultrasound, the cranial perimeter grows at P 90 with a brachiocephalic shape, the falx in the midline present but interrupted at the mid-level CSP absent, The displaced third ventricle, with normal-appearing cerebral hemispheres on the left and right, altered in its middle sector, highlights a heterogeneous central image of approximately 33×27 mm with some internal calcifications with abundant surrounding vascularization.

Sylvian fissure only visible in the left hemisphere grade IV (n), not visible in the right hemisphere, parieto-occipital fissure not visible. At the level of the posterior fossa: cerebellum 40 mm at P95 as usual, vermis present. Fourth ventricle present, cisterna magna 3.7 mm, Willis polygon unfolded and located around the central heterogeneous image. Transfrontal plane: interhemispheric fissure present but separate, Transcaudate: absent caudate nuclei, absent CSP, absent frontal horns, absent corpus callosum knee, increased 6.1 mm left subarachnoid space. Transthalamic: separate thalami, foramen of Monro not visible, 3rd ventricle not visible, corpus callosum not visible, ventricular midline distance not measurable, optic chiasm not visible. Transcerebellar posterior interhemispheric fissure, tentorium cerebelli, occipital lobes, s/p cerebellar hemispheres, s/p vermis In the ultrasound evolution at 30 weeks of gestation, the following assessments were made Abdominal perimeter 237 mm in P10 Femur 57 mm in P50 Current estimated fetal weight of 1317 grams ±12% at P10 Arrhinous face, normal lower facial mass, lens present. Placenta on the posterior face, normal insertion, Grade II. Normal amniotic fluid. external genitalia. female sex Maternal laboratory tests and fetal infection profile, thyroid profile were all normal. The patient is cared for by a multidisciplinary team specializing in fetal medicine, neonatologist, neurosurgeon, pediatric cardiologist, psychology, and palliative care. The approach of the service was fetal brain tumor with congenital heart disease thinking about teratoma-type tumors by frequency She was born vaginally at 39 weeks and died before one hour of life. We proceed to pathological anatomy hypothalamic hamarthoma which is a rare alteration made up of neuroectodermal cells and can be associated with other alterations of the nervous system. He presented hypoplasia of the olfactory bulbs and tracts and agenesis of the corpus callosum. Asymmetric cerebral hemispheres with a predominance of the right hemisphere. Bulky hypothalamic tumor. Collapsed cerebral ventricles. Cerebellum and trunk without alterations. These alterations can be part of syndromes such as Pallister Hall or other Syndromes such as hydroletalus orodigitofacial type IV holoprosencephaly polydactyly, (pseudotrisomy 13) or skeletal dysplasias. The rest of the pathological anatomy presented multiple anomalies, right microphthalmia, right nostril atresia, and right periauricular appendage. Congenital heart disease with heart with double LV outflow tract that is the dominant chamber, right atrioventricular valve with aortic override in 20% Bicuspid aortic valve, preductal coarctation of the aorta, wide IVC. Single umbilical artery with velamentous cord insertion.

Conclusion: And infrecuental case of brain tumor is presentes with determinate a early neonatal death.

Keywords: Brain tumor, hamartoma, syndromes.

PP-12

Improving the quality of care in placenta accreta spectrum reduces the environmental impact of a complex surgery

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Objective: Placenta accreta spectrum (PAS) disorder is a condition that motivates the use of a large number of health resources. Its relationship with massive bleeding and maternal mortality justifies the mobilization of a large number of health professionals, the preparation of multiple physical and technological resources in specialized hospitals, and the use of long surgical times. The reduction in maternal morbidity justifies the environmental impact that the use of these health resources entails, but bearing in mind that most patients with PAS have mild forms of PAS; as well as the greater training of the medical groups in charge of managing these cases is associated with fewer complications and less use of health resources, we wonder if the environmental impact of a complex surgery as that required to treat PAS affected women can be reduced by improving quality of care.

Methods: Taking into account the changes in the PAS management protocol in our institution in a period of 5 years and the previous measurements on the resource use and clinical results, we carried out a measurement of the environmental impact of surgery for the management of PAS before (2015, period 1) and after (2020, period 2) the organization of a specific group for the management of PAS ("PAS team") with the application of quality policies in the care of this condition. In period 1, all patients underwent the same management, including general anesthesia, prophylactic placement of hypogastric arteries catheters and ureteral catheters, reserve of 6 red blood cells units, total abdominal hysterectomy and availability of cell saver in surgical table. In period 2, intraoperative staging was performed under neuraxial anesthesia, reserving endovascular aortic occlusion and ureteral catheters for cases with low parametrial involvement or cervicotrigonal space fibrosis (less than 20% of cases). In this period 2, only 4 units of red blood cells were reserved. For the measurements, the emission factors values and conversion factor for each declared year in Colombia was used. In 2015 this factor was 401gCO_2eq/kwh and in 2020 it was 168gCO_2eq/kwh. For comparison purposes, the one corresponding to 2015 was taken as a measure.

Results: In period 1, the carbon footprint attributable to surgery for PAS treatment was equivalent to 204.7 kilograms of CO_2, reducing to 62.7 kilograms of CO_2 in period 2. The greatest reduction was documented in the lower energy use (76011 w/h in period 1 and 8715 w/h in period 2) by avoiding the use of the fluoroscopy room (with consumption of 63,700 w/h) in the period 2.

Conclusion: The optimization of the use of resources, individualizing the management of PAS according to the severity of the case, allows reducing the environmental impact of a highly complex surgery.

Keywords: Placenta accreta, environmental impact, carbon footprint.

PP-13

Pregnancy and the eye. Changes in morphology of the cornea and anterior chamber of the eye in pregnant woman

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Objective: The main goal of the study was to determine whether uncomplicated pregnancy and natural labor exert influence on the cornea and the anterior chamber of the eye.

Methods: The study included 114 eyes of 57 women in age of 21–35 years old. Only patients in the physiological pregnancy and giving natural birth were recruited into study. Prospective observative examination was performed. Patients were diagnosed twice: in 36 HBD and 6 weeks after labor. Using the Scheimpflug camera (Pentacam system) the following parameters were assessed: central corneal thick- ness (CCT), keratometric parameters: flat (K1) and steep (K2), astigmatism value and axis, anterior chamber depth (ACD), anterior chamber volume (ACV) and anterior chamber angle (ACA). The statistical analysis was carried out in the StatSoft Statistica 13 program.

Results: CCT value is greater in the third trimester than in 6th week after the labour. ACD and ACA values are higher in 36 HBD than in the post-partum period but the difference is not statistically important ($p>0.05$). K1, K2, cylindrical refraction error, axis of cylindrical refraction error do not change.

Conclusion: Authors claim that it is the result from an increase in water retention in the corneal stroma as a response to hormonal changes. The plasticity of the anterior chamber seen before delivery can be a natural adaptive mechanism of the female body, which counteracts the excessive increase in intraocular pressure in the second stage of delivery.

Keywords: Pregancy, cornea; anterior chamber of the eye, parturition, keratometry.

PP-14

Morphological patterns of placental lesions

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Objective: Identification of morphological patterns of placental lesions associated with preeclampsia.

Methods: A retrospective morphological study of 355 placentas sent for histological examination in the period from 2015 to 2020 was carried out. During the analyzed period, 184 placentas from pregnancies with an established diagnosis of preeclampsia and 171 placentas from pregnancies with a physiological course were studied. Placentas from pregnancies with moderate and severe maternal anemia, diabetes and gestational mellitus, Rh incompatibility, as well as intrauterine growth retardation, antenatal fetal death, multiple pregnancies, fetal malformations, premature detachment of normally located placenta and acute inflammatory diseases were excluded from the study placental injury. Data are presented as n (%) or mean ± standard deviation. Continuous variables were compared using Student's t-test (with a normal distribution of sample data) or non-parametric Mann-Whitney test (with non-normal distribution of sample data). Categorical variables were compared using a chi-square test. Differences were considered statistically significant at $p<0.05$

Results: It has been established that preeclampsia is associated with a smaller mass, size and height of the placenta. As morphological patterns associated with preeclampsia, such histological signs of maternal vascular malperfusion, such as infarcts, arterial atherosclerosis, etc., were identified.

Conclusion: The heterogeneity of clinical and histological signs associated with both the physiological and pathological course of pregnancy reflects the different gestational age of the onset of the disease and the stage of development of the adaptive capabilities of the placenta. Identification of morphological patterns associated with hypoxic damage to the fetus allows us to identify a group of newborns with a high risk of chronic hypoxic damage in the perinatal period and to stratify the risk group in the postnatal period in order to reduce infant morbidity and mortality.

Keywords: Placenta, preeclampsia, vascular malperfusion, atherosclerosis, chorangiosis.

PP-15

National importance of the maternal-fetal medicine diagnostic network in the management of monochorionic twin pregnancies

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Objective: To justify the importance of a national maternal-fetal diagnostic network in the correct management of twin pregnancies, potentially complicated.

Methods: The creation of a sole national network of maternal fetal medicine (Dominican Fetal Center), established in 2018, which following standardized protocols has allowed the proper management of mono-mono twins and its complications in a timely manner, aiding with diagnosing conditions that need NIPT or immediate postpartum treatment

Results: With prompt reference, the center was able to diagnose: 3 cases of conjoined twins, 6 cases of mono-mono twins with cord entanglement, 8 cases of selective IUGR, 3 cases of TRAP sequence, 4 cases of TTTS. In all of the cases, the evaluation per Maternal Fetal Medicine service was every 2 weeks, with opportune treatment when needed. Likewise for patients requiring multidisciplinary management after delivery for more complex pediatric cases such as thoracopagus twins with a single cardiac structure.

Conclusion: According to Dominican Republic's birth rate, the number of complicated monochorial twin pregnancies diagnosed by the Center was approximately 70% of the likely existing cases in the country. The creation of a sole network of maternal fetal medicine that is present in the country's largest cities, allows the standardized management for monochorial twin pregnancies by experts, avoiding delayed diagnoses and/or possible complications that could arise peri- and postnatally.

Keywords: Maternal fetal medicine, network.

PP-16

PAS diagnosis established prenatally is linked to a less use of blood components

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Objective: Placenta accreta spectrum (PAS) is a condition related to massive hemorrhage and poly transfusion. Care of affected patients in experienced centers, where trained interdisciplinary groups work, is recommended. However, to achieve the participation of these expert groups, it is essential to have a prenatal diagnosis that allows patient to be guided toward appropriate care. The frequency of PAS not diagnosed before laparotomy is variable, but can be as high as 50%. Among the factors that contribute to the low performance of the US to establish the prenatal diagnosis, are the difficulties to train specialist in the identification of PAS cases, the absence of centers with a high influx of affected patients in many regions, the lack of feedback between the centers that carry out the diagnosis and those who perform surgery. We describe the clinical results of the patients admitted and managed as PAS cases in a Central American public hospital and its relation to having been able to established the diagnosis prenatally.

Methods: A retrospective analysis with data gathered from medical records was carried out, those files were found a search that looked for patients with PAS treated at the Berta Calderon Hospital in Managua, Nicaragua, between June 2017 and September 2021. The diagnostic criteria used were those of FIGO. The population was divided into those who had a PAS prenatal ultrasonographic diagnosis and who were taken to surgery for that diagnosis (Group 1) and those patients whom the diagnosis of PAS was unknown, the disease being identified at the time of caesarean section, that was due to other obstetric condition (Group 2).

Results: During the study period, 103 cases of women with a histological and/or clinical diagnosis of PAS were found during the search. Fifty-one patients had a prenatal ultrasonographic diagnosis of PAS (Group 1) and 52 were unaware of this diagnosis before laparotomy (Group 2). The clinical results of both groups showed a lower transfusions frequency in Group 1 (56.9% vs 96.1% in Group 2), as well as the use of a lower number of red blood cell units (RBCU) received by the ones that required transfusions (median 1 [IQR 0–4] vs 3 [IQR 2–4] in group 2). The frequency of 4 or more RBCU transfusion was also lower in group 1 (29.4% vs 46.1% in group 2). Group 1 also exhibited a non-significant trend toward less volume of blood loss (1000 mL [IQR 750–2000] vs 1500 mL [IQR 1200–1800]), less requirement for pelvic packing with compresses for bleeding control (1.9% vs 7.7%), surgical reinterventions (11.8% vs 17.3%) and surgical site infection (1.9% vs 3.8%) than Group 2. In a significant percentage of patients, the histological diagnosis was not available because the surgical piece was not processed by pathology department.

Conclusion: Establishing a prenatal diagnosis of PAS is related to a lower frequency of transfusions. We observed a high frequency of prenatal diagnostic failures of PAS. It is a priority to improve prenatal detection of this disease.

Keywords: Placenta accreta, prenatal diagnosis, blood components, transfusions.

PP-17

Pharmacovigilance of COVID-19 vaccines in pregnant and lactating women in Portugal and Europe

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Objective: The pandemic caused by SARS-COV-2 led to challenges in diferente áreas. In obstetrics, pregnancy surveillance and childbirth assistance in a pandemic context stand out related to risks of the infection and of vaccination during pregnancy and breastfeeding. SARS-COV infection may be more severe during pregnancy particularly in women with obesity, hypertension, diabetes and cardiac disorders. Even the risk to the foetus is not clear. In our country as in the rest of Europe vaccination particularly with Pfizer (Cominaty), Moderna (Spikevax) or AstraZeneca (Vaxzevria) has been advised for women during pregnancy and breastfeeding. Our aim was to characterize the notifications of suspected Adverse Drug Reactions (ADRs) of the vaccines against Sars-Cov-2 administered during pregnancy and breastfeeding that were received in the Portuguese Pharmacovigilance System and to compare them with those reported in the rest of Europe.

Methods: We evaluate retrospectively the reported data of adverse drug reactions (ADR) to vaccines against Covid-19 in pregnancy and breastfeeding to the European and National Pharmacovigilance Systems from VigiBase, between December 2020 and December 2021. Reports were grouped into exposure in pregnancy with adverse drug reaction. Of the cases of exposure during pregnancy with an adverse reaction to the vaccine, the frequency of the adverse reaction was analysed by Preferred Term (Coding MedDRA). Regarding the characterization of pregnant women, the analyses performed were the median age of pregnant women.

Results: Estimate of vaccinated pregnant or breastfeeding women was 86% and 74% respectively in Portugal and Europe. Percentage of ADR in pregnant women or breastfeeding was 0.14% (n=104) and 0.21 % (n=9022) respectively in Portugal and Europe that were considered serious in 0.04% and 0.11% respectively. Similar contribution for these figures was similar among the different vaccines. Abortion/Stillbirth/Foetal death/premature accounted in Portugal for 13% and 52% and in Europe for 20% and 38% respectively of the total ADRs and of the serious ADRs. Mean age of women with serious ADRs was 33.7 years (Portugal) and 34.3 years (Europe). The plausibility of the causal relation between vaccines and ADRs was considered as possible in almost all cases.

Conclusion: In both Portugal and Europe the incidence of total and serious ADRs attributed to the vaccines against Sars-Cov-2 in pregnant or breastfeeding women was relatively low. However despite their rarity since they can assume high relevant clinical severity it is still justify a constant monitoring and close surveillance of the vaccination in that group

Keywords: Adverse drug reactions (ADRs), vaccines against Sars-Cov-2, pregnancy and breastfeeding.

PP-18

Prenatal diagnostic of vein of Galen aneurysm: prenatal and postnatal management

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Objective: Multidisciplinary diagnostic and management of a term fetus with vein of Galen aneurysm in the prenatal and postnatal state.

Case: 32yo G4P3013 without any past medical history. With 2 previous ultrasounds (sono) that did not report any fetal anomalies. At 37 weeks of GA sono was repeated, that showed a brain mass, suggestive to hematoma, and was transferred to our MFM unit, repeated sono in out institution showed a big, irregular, anecoic structure, supratentorial. It extends from the splenius of the corpus callosum above the cerebellum to the bony skull. The Doppler study shows a turbulent and pulsatile flow suggestive of an aneurysmal malformation of the vein of Galen. No signs of compromised cardiac output

Results: A male newborn was obtained by cesarean section scheduled at 39 week of GA, with adequate weight for gestational age. Apgar 9–10/10. Weight: 7lbs 8oz. Ballard 39 weeks complicated neonatal transitional period, presenting at 48 hours of life, generalized tonic-clonic seizures and high blood pressure levels, for which he was admitted, remaining 12 days in neonatal intensive care unit. A transfontanellar ultrasound was performed results favor of hemorrhage brain grade II. Echocardiogram reporting patent foramen ovale with no other pathological findings. Computerized axial tomography was performed, reporting a probable aneurysm of the vein of Galen. At 2 months of life, a diagnostic cerebral arteriography of 6 vessels was performed, showing a mixed plexiform arteriovenous malformation with a fistulous component of the vein of Galen with a true double carotid aneurysmal reservoir of the vein of Galen and internal cerebral vein with a diameter of 6–8 cm long, nourished by collateral and terminal branches of the bilateral anterior cere-

bral artery and the bilateral vertebrobasilar system. Its venous drainage towards the straight sinus and Galen's vein, where an aneurysmal dilation of the straight sinus is evident. Using roap mapping, microguiding and microcatheter, two microcatheters are placed over the aneurysmal bleb. A total of 9 endovascular devices are deposited through which heparin is administered, obtaining a great decrease in flow towards the aneurysmal reservoir with an 80% occlusion of the channeled vessel.

Conclusion: The timely diagnosis and multidisciplinary management of cases of fetuses with vein of Galen malformation without signs of cardiac output involvement, represents an opportunity for treatment in developing countries, with good postnatal survival results.

Keywords: Vein of Galen aneurysm, prenatal diagnosis.

PP-19

Prenatal screening for congenital malformations in pregnant women with low income in North Santander, Colombia from 2016 until 2020

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Objective: Congenital anomalies are defined as structural or functional anomalies that occur during intrauterine life. They can affect around 2–4% of all newborns. These anomalies also represent 7–8% of the main cause of global mortality in kids under one year of age. It is estimated that in Latin America approximately 1 out of 10 mortalities in kids under five years of age are caused by these disorders. Thus, congenital anomalies can be the result of genetic disorders, environmental and multifactorial causes. For this reason, the aim of this study is to describe and quantify the presence of congenital malformations in a low-income population.

Methods: From 2016 to 2020 North of Santander's governor started a program called Early Surveillance and Management of Congenital Malformations. In conjunction with the scientific and technological support of NORFETUS, scientists were able to help diagnose congenital malformations in patients with low income and difficult access to health care. In this period, 1.216 ultrasound screenings were conducted in women with no prior conceptional studies. The abnormalities were classified by the affected systems such as the cardiopulmonary system, the Central nervous system, the genitourinary system, the digestive system-the abdominal wall, as well as other malformations.

Results: Among the 1216 ultrasound studies that were conducted, 224 congenital malformations were found. These cases represented 18% of the total screened population. Out of the total diagnosed malformations, 33% were genitourinary malformations (76 cases), 21% were cardiopulmonary malformations (47 cases), 20% were other malformations such as placenta and amniotic fluid abnormalities (45 cases), 19% were central nervous system malformations (42 cases), and 6% were gastrointestinal system malformations (14 cases). Furthermore, some of the fetuses (10 cases in this study) had more than one congenital malformation that were found with the ultrasound.

Conclusion: According to the results of the present study, the congenital malformations screened represented 18% of the total population (1216 pregnant women), these results represent a figure that exceeds the records found in the international medical literature. The genitourinary followed by cardiopulmonary alterations were the most affected systems. Unlike the study carried out in Mexico by Lopez Tamanaja et al. (2019), who mentioned a greater presence of malformations in the face and neck. Then followed by those of the digestive system. This study also contrasts with the results mentioned in a study conducted by Sady Novoa et al. in Cuba (2020), where the group of most frequent malformations was those of the cardiovascular system followed by those of the central nervous system. Despite what was concluded in a Spanish study led by Ares et al. (2018), where it is described that there is no relationship between the socio-economic level and the number of live births with congenital malformations, data from this stu

Keywords: Congenital malformations, low income, ultrasound.

PP-20

Deficit Iodine in pregnant attended the obstetric consultation, Hospital Maternidad Nuestra Señora de la Altagracia

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Objective: To show that iodine deficiency in pregnant patients in the Dominican Republic is high.

Methods: Type of study: a cross-sectional observational study with prospective evidence was carried out.

Results: Of the 200 patients 83 for the 41.5%have iodine deficiency, despite the daily consumption of foods that are important sources of iodine (salt, marinades, fish, etc.). Iodine deficiency was present during all quarters with 36% in the first quarter.

Conclusion: 41.5% of the 200 patients investigated iodine deficiency in the urine. Hypertensive disorders were the most frequent personal history in 17%. The study included 15 patients with carbohydrate disorders (type 1, 2 and gestational diabetes mellitus) of which 11 corresponding to 73.3% were iodine deficiency, increased maternal and fetal morbidity and mortality. The diet includes the consumption of foods that contain iodine such as iodized salt, deep-sea fish.

Keywords: Iodine deficiecy, hypothyroidism, pregnancy, iodine.

PP-21

The influence of cone height after loca cervical pre-invasive treatment on preterm birth

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Objective: As it is known, cervical insufficiency is one of the causes of preterm birth. Thus, cone height may be a possible risk of subsequent preterm delivery. This study aimed to determine this risk after excisional or destructive cervical preinvasive treatments.

Methods: Our retrospective cohort study included 1651 patients. CO_2 laser vaporization treatment included 175 patients and cold knife conization 1476 women. Sixty-four of them became pregnant after the procedure. We investigated the relationship between cone height and subsequent preterm delivery. We used the logistic regression analysis and Cox proportional hazard modeling statistical analysis. All authors have no conflict of interest in this study.

Results: Women with cone height of at least 10 mm had a higher rate of preterm delivery (5 of 23 versus 1 of 41, p=0.01). A statistically significant relationship existed in three variables: cone height of at least 10mm, duration of pregnancy, and possible occurrence of preterm delivery (odds ratio 11.1, p=0.05) between the women treated with CO_2 laser vaporisation and the risk of preterm delivery and duration of pregnancy.

Conclusion: Cold knife conization with cone height of at least 10 mm, is an independent risk factor for preterm birth in the subsequent pregnancy. On the other hand, the CO_2 laser vaporisation itself is not a risk factor for this condition.

Keywords: Cone height, cervical conization, CO_2 laser vaporization, preterm birth.

PP-22

The role of shared risk factors for COVID-19 and preeclampsia: an observational study

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Objective: The association between preeclampsia (PE) and COVID-19 is under study. Previous publications have hypothesized the existence of shared risk factors for both conditions or a deficient trophoblastic invasion as possible explanations for this association. The primary aim of this study was to examine baseline risk factors measured in the first-trimester combined screening for PE in pregnant women with COVID-19 versus the general population. A secondary aim of this study was to compare risk factors among patients with mild and severe COVID-19.

Methods: This was an observational retrospective study conducted at Vall d'Hebron Hospital Campus (Catalonia, Spain). Study patients were 231 pregnant women undergoing the first-trimester screening for PE and positive for SARS-CoV-2 between February 2020 and September 2021. The reference cohort were 13,033 women of the general population from 6 centers across Catalonia from May 2019 to June 2021. Based on the need for hospitalization, patients were classified in two groups: mild and severe COVID-19. First-trimester screening for PE included maternal history, mean arterial blood pressure (MAP), mean uterine artery pulsatility index (UtAPI), placental growth factor (PlGF) and pregnancy-associated plasma protein-A.

Results: The proportion of cases at high risk for PE was significantly higher amongst the COVID-19 group compared with the general population, (19.0% and 13.2%, respectively; p=0.012). When analyzing risk factors for PE individually, women with COVID-19 had higher body mass index (BMI), higher but clinically doubtful UtAPI, higher incidence of chronic hypertension, and there were fewer smokers. PlGF values did not differ significantly between both groups. Moreover, in women with severe COVID-19, as compared with mild COVID-19, BMI and MAP were significantly higher, whereas PlGF and UtAPI did not differ significantly.

Conclusion: In patients with COVID-19, there was a higher proportion of women at a high risk for PE at the first-trimester screening than in the general population, mainly due to maternal risk factors, rather than placental signs of a deficient trophoblastic invasion. Likewise, the proportion of women showing high risk for PE tended to be greater amongst those with severe forms of COVID-19 due to maternal risk factors only.

Keywords: Preeclampsia, screening, PlGF, uterine artery Doppler, first trimester, risk factors, COVID-19, SARS-CoV-2.

PP-23

Uterine rupture secondary to cornual ectopic pregnancy in the third trimester. Case report

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Objective: Interstitial pregnancy is a subclassification within ectopic pregnancies with low frequency and high morbidity and mortality, where the product of pregnancy is implanted in the intramural fragment of the tube. Most of the reported cases happens during the first trimester, and its natural evolution is the rupture, which leads to massive hemorrhage due to high vascularization. Considering this fact, there are few reports of interstitial pregnancies in the third trimester. In the current case report we present a pregnancy of 32 weeks of gestational age complicated by a uterine rupture secondary to an interstitial pregnancy

Case: 32-year-old patient. Cocaine and PBC user, in abstinence since the first trimester of pregnancy, psychiatric treatment for depression that she abandoned. Laparotomy appendectomy. Syphilis diagnosed 8 years ago, with complete treatment. Carrier of high-grade cervical dysplasia diagnosed in current pregnancy. 6 pregnancies, 4 vaginal deliveries, 2 normal weight terms, 1 stillbirth at 29 weeks due to syphilis, 1 early spontaneous abortion, 1 left ectopic pregnancy with laparoscopic salpingectomy. Blood group A Rh+. Patient referred from the interior of the country (Tacuarembo) due to a fetal diagnosis of omphalocele and myelomeningocele at 23 weeks, to the high-risk obstetric polyclinic of the CHPR. As pregnancy complications, she presented a lower urinary tract infection at 24 weeks with complete treatment and good response, she threatened preterm labor at 28 weeks that required admission to the CHPR inpatient ward, where she received antenatal corticosteroid therapy. During the fetal assessment, obstetric ultrasounds with Doppler study, fetal echocardiogram, neuroscan, fetal MRI are requested, from which the following is concluded: Lumbosacral myelomeningocele associated with a small posterior fossa with significant descent of the cerebellar tonsils, compatible with CHIARI T2 malformation . Mild bilateral supratentorial ventriculomegaly. Homogeneous placenta, it is low and anterior, impressing occlusive. Severe oligoamnios. Good maternal-fetal hemodynamic profile with increased maternal resistance. Doubts arise from the assessment regarding the location of the pregnancy since there is no evidence of myometrial tissue surrounding the product of pregnancy. During the analysis of the situation and until the location was defined, an expectant and vigilant behavior was decided on maternal and fetal health. At 32 weeks of gestational age, she presents a sudden picture of severe abdominal pain, predominantly in the right hemiabdomen, nausea and vomiting, absence of fetal movements. No genitorrhea or hydrorrhea. Restlessness, blood pressure 70/40, heart rate 120 bpm. Mucous skin paleness. Abdomen, pain on superficial and deep palpation predominantly in the right abdomen, without parietal contracture. Normal fetal heartbeat, 2 uterine contractions in 10 minutes, vaginal examination, cervix closed. With a diagnosis of acute abdominal pain with hemoperitoneum, probable uterine rupture with hemodynamic instability, it was decided to perform an emergency exploratory laparotomy. Intraoperatively, massive hemoperitoneum of bright red blood and clots are confirmed. In the anterior uterine face, lateralized to the right, a sector of anfractuous vessels that bleed spontaneously and actively. At the level of the uterine fundus towards the posterior face, a break in the continuity of the uterine wall. A live newborn was obtained at 32 weeks and was admitted to the ICU due to prematurity and a previously diagnosed pathology. A hysterectomy was performed as necessary. Postoperatively, the patient presented functional ileus with good evolution. Pathology reveals: right cornual interstitial pregnancy with rupture of the uterine wall. Neck with a high-grade squamous intraepithelial lesion (CIN2-CIN3).

Results: As previously mentioned, cornual pregnancy has a low incidence. Risk factors are common to tubal ectopic pregnancy, among which we highlight a history of previous ectopic pregnancy with salpingectomy, as presented by our patient, tubal adhesions, history of pelvic inflammatory disease, the use of intrauterine devices as a contraceptive method, as well as previous surgeries at the tubal level. Additionally, our patient has a history of appendectomy, which favors adhesions at the pelvic level. Clinically, ectopic pregnancy presents with a picture characterized by amenorrhea, metrorrhagia and abdominal pain. The classic presentation of cornual pregnancy does not differ from those exposed, with the exception that given the anatomy of the uterine horn -greater compliance than the tube and greater irrigation- it can progress silently even until the beginning of the second trimester of pregnancy. 2.1.5 The clinical presentation of uterine rupture can vary depending on the site. Abdominal pain with/without hemodynamic changes, constant accompanied by signs of intra-abdominal hemorrhage - hypotension, tachycardia, increased abdominal perimeter- are complete signs and symptoms of uterine rupture. However, the degree, character, and location of the pain are often variable, and the signs and symptoms of intra-abdominal hemorrhage may be subtle. Acute abdominal pain is the main sign of antepartum uterine rupture, as it happened in our case. Bradycardia, sometimes preceded by variable or late decelerations, is the most common clinical manifestation

of uterine rupture. However, no fetal heart rate pattern is pathognomonic for rupture, and fetal heart rate changes alone are not helpful in detecting or excluding rupture. In the reported case, the fetal heartbeats remained at a normal rate. No previous cardiotocographic record was achieved given the urgency of the case. Uterine tenderness, cessation of contractions and/or change in the shape of the uterus are other frequent symptoms. Bleeding tends to be heavy when the cervix and upper vaginal wall are involved. Hematuria may occur if the rupture extends into the bladder. 6 The reported case was asymptomatic until the moment of uterine rupture, being previously diagnosed by ultrasound and MRI.

Conclusion: Interstitial ectopic pregnancy is extremely rare, it is a difficult diagnosis to establish due to the non-specific clinical picture at the beginning and the low radiological sensitivity that it offers at a higher gestational age. Although the routine treatment consists of cornual resection or hysterectomy, there are exceptional cases where expectant management can be offered knowing that there is a high risk of hemorrhage, uterine rupture and death of the binomial..

Keywords: Interstitial ectopic pregnancy.

PP-24

Villoglandular-type adenocarcinoma of the cervix during pregnancy: a case report

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Objective: About 1% to 3% of cervical cancers are diagnosed during pregnancy, or in the first 12 months postpartum. Whether or not pregnancy is capable of accelerating cancer progression is still controversial. Villoglandular adenocarcinoma of the cervix, (VGA) is rare, it usually presents at younger ages than other adenocarcinomas, with a higher incidence around 30 years of age, and with a favorable prognosis. It has little capacity to generate distant metastases, and does not usually associate with vascular or lymphatic involvement. We present the case of a pregnant patient diagnosed with villoglandular adenocarcinoma of the cervix.

Case: Diagnosis is made at week 34 of pregnancy, confirmed by colposcopy biopsy. It was decided to terminate the pregnancy at week 35 of gestational age, by cesarean section with radical hysterectomy and lymphadenectomy. The surgery was carried out without incidents, and the patient was discharged with good clinical evolution.

Conclusion: Villoglandular adenocarcinoma of the cervix corresponds to a well-differentiated variant of cervical adenocarcinoma, with a good prognosis. Few cases have been reported in pregnant patients, usually presenting as macroscopically polypoid or papillary cervical masses. Treatment can range from surgical conization, trachelectomy or even hysterectomy. As reviewed in literature, the majority of cases associated with pregnancy were treated by performing a cesarean section followed by radical hysterectomy. We present the case of diagnosis in a patient with a 34-week gestation, with surgical resolution.

Keywords: Adenocarcinoma, cervical cancer, villoglandular adenocarcinoma, pregnancy, cancer in pregnancy.

PP-25

Prevalence and epidemiological behavior of COVID-19 in pregnant women in a Maternal-Fetal Medicine Department

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Objective: To determine the prevalence and the epidemiologic behavior of the COVID-19, in pregnant patients in the fetal-maternal medicine department of the National Perinatology Institute in Mexico.

Methods: An observational, descriptive transversal and retrolective study was carried out and non-probabilistic sampling for consecutive cases. All pregnant women who came to the fetal-maternal medicine department of the National Perinatology Institute in Mexico, positives for COVID-19, during the period between April 1st, 2020, to May 31st, 2021, were included.

Results: Institutional prevalence was 40.35%, 277 per 1000 pregnant women. While in the Maternal-Fetal Medicine Department had a prevalence of 27.89%, maintaining the institutional prevalence since 279 positives per 1000 patients, it should be noted that, like many medical services, we were the first contact for many of these patients due to what his COVID-19 status was still undetermined and this favored the contagion of the medical and paramedical personnel of the department, even taking the protection measures. The epidemic curve began on 04/22/2020 and it closed on 05/31/2021 encompassing 14 months. The highest contagion peak was during November-December 2020 (31.3%) and a decrease was observed of the curve in the months of June and October 2020, and April 2021. There were 35 cases of pregnancy loss, 325 with a pregnancy that finish in delivery and 57 with a pregnancy in course. The median age was 30.4 years. The predominant symptom was headache with

the 18.7%. and we found 113 positive newborns. Regarding the lev.

Conclusion: The prevalence observed in our hospital and our department is within the average ranges reported in the literature, since it ranges between 14 and 42%. The Maternal-Fetal Medicine department is a clinical area in which we are the first to evaluate pregnant patients together with the emergency admission service, so the medical and paramedical staff were extensively exposed to patients who had not yet the test status, which favored contagion among the staff. An increase in the frequency of pregnancy losses was observed, which should be studied to see the contribution of SARS-COV2. The most frequently found sources of contagion were a positive or suspicious family member, a positive or suspicious coworker, and the use of public transportation, which at the time allowed us to emphasize the care that we should all have in the face of all these possible sources of contagion.

Keywords: COVID-19, pregnancy, prevalence, epidemiologic behavior.

PP-26

Metastatic gastric cancer simulating a primary ovarian cancer presenting during pregnancy. A case report

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Objective: Carry out a review of the literature on what has been reported so far on the treatment and prognosis of this rare disease and its presentation during pregnancy.

Case: A 38-year-old patient, gravida 2 abortion 1 (GIIAI) coursing her second pregnancy with the diagnosed of a moderately differentiated adenocarcinoma compatible with primary ovarian cancer at 15 weeks of gestation. During pregnancy she received 6 chemotherapy cycles with carboplatin and paclitaxel. Her pregnancy continues with no complications. Follow-up with growth curve and Doppler velocimetry is maintained until week 34.4 where fetal weight is reported in percentile 1 with Doppler velocimetry without alterations, for which it is diagnosed with intrauterine growth restriction (IUGR) type I. A caesarean section was performed. A right ovarian mass of approximately 10 centimeters was identified and it was reported as a endometroid carcinoma. At the end of the puerperium, she was readmitted to complete the surgical approach with laparoscopic ovarian cytoreductive surgery. reporting poorly differentiated invasive adenocarcinoma invasive in gastric mucosa, clinical stage IV.

Conclusion: We present a case of an invasive poorly differentiated adenocarcinoma in gastric mucosa metastatic to the ovary simulating a primary ovarian cancer.

Keywords: Krukenberg, chemotherapy, pregnancy, ovarian tumors.

PP-27

Case report: polycythemia anemia syndrome in monochorionic diamniotic twin pregnancy

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Objective: present the clinical case of a monochorionic twin pregnancy complicated with a TAPS sequence.

Case: Polycythemia anemia sequence (TAPS) is an exclusive and serious complication of monochorionic twin pregnancies. This is generated due to the presence of placental arteriovenous anastomoses which form vascular connections with each other. TAPS is a chronic atypical form of transfused transfusion syndrome (TTTS) caused by slow transfusion of red blood cells through a few small placental arteriovenous anastomoses (<1 mm in diameter), resulting in anemia of one of the fetuses and polycythemia in the other. It is very rare. We present the clinical case of a patient assessed at the Pereira Rossell Hospital Center, gynecological clinic A, who was undergoing a monochorionic biamniotic twin pregnancy, in which at 34 weeks, an ultrasound diagnosis of TAPS was performed, proceeding end the pregnancy, and confirm the diagnosis at birth.

Conclusion: Polycythemia anemia sequence (TAPS) is a serious complication, which occurs with an incidence of 2–5% of monochorionic twin pregnancies. In this case, our patient presents with spontaneous TAPS, which, in the absence of other clinical signs of TTTS, can be considered an atypical chronic form of TTTS. It is important to point out that in our patient, an early diagnosis was made, which is essential to avoid progression to the different stages of TAPS that can culminate in the death of a fetus or both. Postnatal diagnosis is based on a difference in hemoglobin (Hb) between twins ≥8.0 g/dL. In this case, the first twin had an Hb of 23.9 g/dL while the second twin had an Hb of 8.4 g/dL.

Keywords: TAPS, monocorial complications.

PP-28

Detection of two cases of pentalogy of Cantrell by prenatal ultrasonography

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Objective: To present the case of two patients who attend the first prenatal consultation, where an obstetric ultrasound is performed, finding a series of congenital malformations within the first trimester ultrasound.

Cases: Pentalogy of Cantrell (PC) is a rare and usually lethal congenital disorder, with approximately 250 cases reported to date, which is made up of 5 congenital malformations that arise from the somatic layer of mesoderm. The full spectrum of this pathology is composed of anterior diaphragmatic hernia, omphalocele, diaphragmatic pericardium, intracardiac congenital anomalies, and lower third of the sternum. The prevalence of this pathology is low, 5.5 per million live births, where it is predominant in males with a ratio of 2:1. Early identification of these abnormalities is important for diagnosis and surgical planning, and subsequently for prognostic implications. In these case reports, two patients are presented where the diagnosis of pentalogy of Cantrell was integrated by abdominal ultrasound.

Results: Formally, pentalogy of Cantrell is a set of 5 abdominal midline congenital malformations with a supraumbilical wall defect, inferior sternum defect, anterior diaphragmatic deficiency, diaphragmatic pericardium defect, and various congenital intracardiac anomalies. The heart defect is variable, but is commonly accompanied by a ventricular septal defect, followed by an atrial septal defect, tetralogy of Fallot and pulmonary stenosis. The etiology to date is uncertain and is considered multifactorial, associations have been seen with exposure to certain teratogens such as the use of warfarin, thalidomide, infectious agents such as influenza, as well as chromosomal abnormalities such as Turner syndrome and trisomy 18. A large part of newborns die within the first hours of extrauterine life secondary to the great anatomical defect of the anterior wall of the thorax and abdomen. In itself, a large part of survival depends on aggregate heart defects, with associated complex heart disease being the leading cause of morbidity and mortality, followed by sepsis.

Conclusion: Our team considers it necessary to publish cases of pentalogy of Cantrell and other forms of abdominal wall closure defect in order to continue researching and being able to diagnose them earlier. The ultrasound findings, especially in the cases mentioned, mark the prognosis of this frequently fatal entity. Although the etiology of CP is not defined, a chromosomal study and genetic counseling are recommended, as well as multidisciplinary management after diagnosis.

Keywords: Ectopia cordis, congenital malformations, ventral midline defects, pentalogy of Cantrell, thoraco-abdominal defect.

PP-29

Comparative study of perinatal outcomes in diabetes and pregnancy in patients without COVID-19 during the pandemic

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Objective: to determine if the COVID-19 pandemic has had a negative impact on adverse perinatal outcomes in diabetic women in whom SARS-CoV-2 infection could not be confirmed.

Methods: Retrospective cohort in two periods, prior to the start of the pandemic and during confinement by COVID-19, pregestational and gestational diabetic patients were evaluated in both groups and the association with a composite perinatal outcome was determined, the relative risk (RR) was calculated for each type of diabetes.

Results: No statistically significant difference was found for any of the groups regarding the composite perinatal outcome during the pandemic compared to the group before the pandemic Gestational diabetes mellitus (p=0.56) RR: 0.80 (CI: 0.43–1.47), Type 2 diabetes (p=0.051) RR: 0.704 (CI: 0.48–1.02), Type 1 diabetes (p=0.054) RR: 0.45 (CI: 0.15–1.35).

Conclusion: No significant differences were found in the composite of neonatal morbidity in diabetic patients before and after the pandemic, regardless of the type of diabetes; probably because high-specialty services such as endocrinology and maternal-fetal medicine during the pandemic did not reduce the number of assessments maintaining good prenatal control despite the adverse environment during the pandemic.

Keywords: Diabetes: pandemic, perinatal outcome, gestational diabetes, confinement.

PP-30

Performance of a standardized ultrasonographic evaluation for the detection of the placenta accreta spectrum

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Objective: To determine the performance of a standardized ultrasonographic evaluation for the detection of the placenta accreta spectrum, to evaluate the global performance, and through each of the signs to assess the efficacy for the detection and prediction of the placenta accreta spectrum and specifically placenta percreta.

Methods: This was a cross-sectional and analytical study, including patients referred with suspected of the placenta accreta spectrum, who had at least one ultrasonographic evaluation in the Department of Maternal-Fetal Medicine of the National Institute of Perinatology, through a standardized report, in the period from November 2019 to March 2021.

Results: In this study, a total of 41 patients were assessed, the range of gestational age of the evaluated patients oscillated between 19.1 and 36.5 weeks, with an average of 32.3±5.1 weeks. In the descriptive analysis of the patients in whom some diagnosis of placenta accreta spectrum was confirmed, the average parity was 3.3±1.2 pregnancies. 38.6%, 51.1% and 4.5% had 1, 2 and 3 previous cesarean sections, respectively. 94.3% of the patients had placenta previa. The placenta accreta spectrum was diagnosed in 25 patients (60.9%), of which 2 (8%) were diagnosed as accreta, 9 (36%) as increta, and 14 (56%) as percreta. The global of a standardized ultrasonographic evaluation was as follows: sensitivity of 93% and specificity of 86%, positive predictive value of 93%, negative predictive value of 86%, positive likelihood ratio 6.64 and negative likelihood ratio 0.08.

Conclusion: The findings of this study show that the performance of a standardized ultrasonographic evaluation for the detection of the placenta accreta spectrum improves diagnostic capacity in patients with suspected this pathology, but this a limited number of patients, we need to extend the number of patients evaluated and if corroborated this findings. It may be established as a diagnostic tool in a tertiary referral center with an experienced multidisciplinary team with the aim of improving maternal mortality and morbidity.

Keywords: Standardized, ultrasonographic, accreta.