

<p>稿件編號： OO1</p>	<p style="text-align: center;">雙胞胎輸血症候群雷射手術後有無隔膜破損之影響及預後 Effects and outcomes of septostomy in twin-to-twin transfusion syndrome after fetoscopic laser therapy</p>
<p>臨時收件編號： 2684</p>	
<p>論文發表方式： 口頭報告</p>	<p>Background: To evaluate the incidence and outcomes of septostomy in twin-to-twin transfusion syndrome (TTTS) after fetoscopic laser therapy.</p>
<p>論文歸類： 產科</p>	<p>Methods: A retrospective analysis of TTTS postlaser septostomy between 2005 and 2018 was performed. Postlaser septostomy was diagnosed using both (1) a free-floating intertwin membrane flap visible on ultrasound examination and (2) the rapid equalization of amniotic fluid maximum vertical pocket in the donor and recipient amniotic sacs observed after laser therapy. Perinatal survival, neonatal brain image anomaly, gestational age at operation and birth, incidence of premature rupture of membranes (PROM) within 3 weeks after operation, pseudoamniotic band syndrome, and cord entanglement were evaluated.</p> <p>Results: In the 159 TTTS cases collected in this study period, 12 (7.54%) had postlaser septostomy. The total fetal survival rate (54.2% vs 73.6%, respectively, $p = 0.041$) after laser therapy was lower, the mean gestational age at delivery was earlier (27.8 weeks vs 34.4 weeks, respectively, $p = 0.009$), the risk of PROM within 3 weeks after operation (33.3% vs 5.4%, respectively, $p = 0.004$) was increased, and the cord entanglement (16.7% vs 0% respectively, $p = 0.005$) and brain image anomaly rates (23.0% (3/13) vs 5.0% (11/218), respectively, $p = 0.035$) were higher in the TTTS group with postlaser septostomy. After considering the severe Quintero stages (stage III and IV) before laser therapy, postlaser septostomy was the only variable [$p = 0.003$, odd ratio = 5.1 (1.28–22.2)] to predict neonatal brain image anomaly. Postlaser septostomy combined with severe Quintero stages could predict PROM within 3 weeks after laser therapy [$p = 0.001$, odd ratio = 14.1 (2.8–70.1)] and $p = 0.03$, odd ratio = 5.4 (1.2–25.0), respectively] and delivery before the gestational age of 28 weeks [$p = 0.017$, odd ratio = 4.5 (1.3–15.8) and $p = 0.034$, odd ratio = 2.3 (1.1–5.1), respectively]. The risk of pseudoamniotic band syndrome was not increased by postlaser septostomy in this case series.</p> <p>Conclusions: Postlaser septostomy in TTTS was associated with poorer fetal survival and more adverse perinatal outcomes, including brain image anomaly, PROM within 3 weeks after operation, and early delivery, even after considering severe Quintero stages before laser therapy. Efforts should be made to prevent septostomy during laser therapy, and septostomy as the primary method to treat TTTS is not advisable.</p>

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<p>稿件編號： OO2</p>	<p>女性生殖道披衣菌感染的核酸擴增照護端檢測：診斷準確性的前瞻性研究 A Nucleic Acid Amplification Point-of-Care Test for Genital Chlamydia trachomatis Infection in Women: A Prospective Study of Diagnostic Accuracy</p>
<p>臨時收件編號： 3369</p>	
<p>論文發表方式： 口頭報告</p>	<p>鄭博仁 林口長庚紀念醫院 基因醫學中心</p> <p>Background: Rapid Point-Of-Care Tests for Chlamydia trachomatis (CT) may reduce onward transmission and reproductive sexual health (RSH) sequelae by reducing turnaround times between diagnosis and treatment. The Coyote mini 8 plus single module PCR system (GeneJet Biotech Co., Ltd.) runs clinical samples through a nucleic acid amplification test (NAAT)-based CT cartridge, delivering results in 30 min.</p> <p>Methods: Prospective diagnostic accuracy study of the Coyote mini 8 plus CT-assay in OB/GYN clinic in a teaching hospital on additional-to-routine self-collected vulvovaginal swabs. Samples were tested “fresh” within 10 days of collection, or “frozen” at –80 °C for later testing. Participant characteristics were collected to assess risk factors associated with CT infection.</p> <p>Results: CT prevalence was 8.5% (69/812) overall. Sensitivity, specificity, positive and negative predictive values of the Coyote mini 8 plus CT assay were, respectively, 98.3% (95% Confidence Interval (CI): 91.3–99.8), 97.9% (95%CI: 96.7– 98.9), 81.2% (95%CI: 64.6–86.7) and 99.8% (95%CI:99.1–100). The only risk factor associated with CT infection was being a sexual contact of an individual with CT.</p> <p>Conclusions: The Coyote mini 8 plus CT-assay is a 30-min, fully automated, high-performing NAAT currently for CT diagnosis in women, making it a highly promising diagnostic to enable specific treatment, initiation of partner notification and appropriately intensive health promotion at the point of care.</p>
<p>論文歸類： 產科</p>	
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稿件編號： 003	超音波評估預測早產之新評測方法探討 Novel sonographic evaluation for prediction of preterm birth
臨時收件編號： 3417	龔晏萱 ¹ 葉長青 ¹ 黃本湘 ¹ 張家銘 ¹ 王鵬惠 ¹ 台北榮民總醫院婦女醫學部 ¹
論文發表方式： 口頭報告	Nowadays, preterm birth relating complications remain the single largest cause of neonatal morbidity and mortality worldwide, no matter the economic status of the society are. Besides, the risk factors of preterm birth are still uncertain except of previous preterm birth. The early detection of preterm birth still limited in current practice. Hence, we strive for developing new sonographic tool to evaluation preterm birth. Except of cervix length100 degree are reliable combination tools for prediction of preterm birth. Moreover, these tools are not invasive and easy to approach via trans-abdominal sonography. This study illustrate the theory, mechanism, sensitivity, specificity, predict value, likelihood ratio, measurement and application of these novel sonographic tool.
論文歸類： 產科	

稿件編號： 004	分析子宮內胎兒生長遲滯為開放性動脈導管之危險因子：利用雙胞胎合併一胎兒生長遲滯之模型
臨時收件編號： 2696	<p>Association of Intrauterine growth restriction and Patent ductus arteriosus: the use of twin pregnancies model</p> <p>詹耀龍¹ 楊宗元¹ 林口長庚婦產部¹</p>
論文發表方式： 口頭報告	Purpose: To evaluate the association of intrauterine growth restriction (IUGR) and the incidence of patent ductus arteriosus (PDA) by twin pregnancy with selective IUGR (sIUGR) model.
論文歸類： 產科	<p>Patients and methods: sIUGR was defined as the presence of (i) a birth weight discordance of >25% and (ii) a smaller twin with a birth weight less than the 10th percentile in twin pregnancy. All twin pregnancies born in Linkou Chang Gung Memorial Hospital with gestational age > 24 weeks from 2013 to 2018 were reviewed. Pregnancies with major anomaly, intrauterine fetal demise, twin-to-twin transfusion syndrome were excluded. PDA is diagnosed via echocardiography within one 1 week after birth. Hemodynamically significant PDA (Hs-PDA) is defined as PDA plus increased pulmonary circulation, poor systemic perfusion, cardiomegaly, pulmonary edema or hypotension requiring pharmacotherapeutic intervention.</p> <p>Result: Screening from 1187 pregnancies, there were 53 dichorionic (DC) and 43 monochorionic (MC) twins included into this study. In DC twins, both the incidences of PDA (30.19 % vs. 9.43 %, p = 0.003, respectively) and HS-PDA (24.53% vs. 5.66%, p = 0.002, respectively) are higher in sIUGR fetuses than the appropriated for gestational age (AGA) co-twin, in PDA ; in HS PDA, respectively). In MC twins, both the incidences of PDA and HS-PDA are not significant different between sIUGR fetus and the (AGA) co-twin. Total incidence of PDA are higher in MC than DC twin with sIUGR.</p> <p>Conclusion: From the results of DC twin pregnancies with sIUGR model, authors concluded that IUGR increased the risk of PDA. The intertwin anastomoses may increase the incidence of PDA significantly either or combined by perfusion or hypoxia stress effect, via the patent intertwin circulation.</p> <p>Key words: patent ductus arteriosus, intrauterine growth restriction, twin pregnancy.</p>

<p>稿件編號： 005</p>	<p>懷孕晚孕時期因為胎兒異常而接受胎兒心跳終止術的預後：單一中心的十年回溯型分析</p>
<p>臨時收件編號： 2869</p>	<p>The Maternal Outcome of Pregnant Women Who Received Selective Feticide Due to Fetal Anomalies in Late Trimester: A Retrospective Study of 10 Years` Experience in A Single Center</p> <p>宋承嫻¹ 蕭勝文¹ 台北長庚醫院¹</p>
<p>論文發表方式： 口頭報告</p>	<p>Objective</p> <p>According to WHO recommendations, feticide before termination of pregnancy after 20 weeks of gestation is suggested. Our study evaluated the effectiveness and safety of intra-cardiac injection of potassium chloride to induce fetal demise. The indications for termination of pregnancy, complications, and further fetal outcomes were documented.</p>
<p>論文歸類： 產科</p>	<p>Materials and methods</p> <p>In the retrospective cohort study, we collected the medical record in a tertiary center from 2009 to 2018. All women who received feticide at 2nd or 3rd trimester were enrolled. Multiple gestation reduction, heterotopic pregnancy or elective maternal request were excluded in our study.</p> <p>Results</p> <p>During the study period, 68 feticides with potassium chloride were performed at a mean gestational age of 21.11 weeks (ranging from 13 weeks to 35 weeks). The mean maternal age was 32.29 years old. Selective feticide was performed in 19 patients with multiple gestations. Two patients had to receive the procedure again due to unsuccessful fetal demise. The indications for feticide were: morphologic defect(61.8%, n=42) and genetic-chromosomal abnormalities (30.9%, n=21), obstetrical complications(5.9%, n=4), and maternal request(1.5%, n=1). Among the morphologic defect group, the most frequent indications were: brain anomalies accounts for 46.3% of the group(n=19). There was no immediate maternal morbidity or mortality after the procedure.</p> <p>Conclusion</p> <p>In our experience. Intra-cardiac potassium chloride injection could be a safe and effective method in inducing fetal asystole. The patients should understand the risk of complications before the procedure. Feticide before termination of pregnancy should only be performed after counseling with a multidisciplinary team.</p>

<p>稿件編號： 006</p>	<p style="text-align: center;">早期流產病因的分析：母體自體免疫疾病及流產物染色體異常的角色 Analysis in early pregnancy loss: The correlation between maternal autoimmune diseases and chromosomal abnormalities in early pregnancy loss</p>
<p>臨時收件編號： 2882</p>	
<p>論文發表方式： 口頭報告</p>	<p>初福傑¹ 邱俐琄² 洪泰和¹ 蕭勝文¹ 羅良明¹ 台北長庚紀念醫院婦產科¹ 林口長庚紀念醫院婦產部²</p>
<p>論文歸類： 產科</p>	
<p>The incidence of early pregnancy loss (EPL) was reported to be 10~15%, with a higher incidence after each consecutive abortion, and as maternal age increases. Chromosomal abnormalities account for 50~60% of these cases, with the most common cause (86%) being aneuploidy, and a further 6% and 8% are attributed to chromosomal deletions or duplications, and single gene mutations. Prior studies show that 20% of those who experience recurrent abortions (three consecutive abortions or more), were positive for autoimmune markers, including anti-phospholipid antibodies, anti-thyrotropin, protein-c deficiency, etc. These women were mostly asymptomatic, and yet had a higher frequency of abortions in comparison with the general population. Women with positive anti-phospholipid antibodies and anti-nuclear antibodies carry a 50% and 30% risk of abortion respectively and those with anti-thyroid antibodies and protein C deficiency have a two-three fold increase in abortion rate.</p> <p>However, the above findings are mainly derived from studies on American or European populations. It is unclear whether Taiwanese women have a similar profile. Therefore, the main theme of this study is to establish the correlation between maternal autoimmune diseases and chromosomal abnormalities in early pregnancy loss (EPL) before 12 weeks of gestation in a homogenous Taiwanese population.</p> <p>Our inclusion criteria are nulliparity women age more than 20 years old and gestational age less than 12 weeks by last menstrual period, confirmed the diagnosis of blighted ovum or intrauterine fetal death. The exclusion criteria are incomplete abortion and septic abortion.</p> <p>Of these first trimester miscarriages, 64% are caused by chromosome abnormalities. The majority of these (87%) are numerical abnormalities, including trisomies (74%), monosomies (13%). Structural chromosomal abnormalities (duplication or deletions detected by 750k array) account for a further 13%. Besides, 15% women with early pregnancy loss are positive for immune markers, such as Anti-phospholipid antibodies, anti-TPO and protein C deficiency. The identification of the cause of spontaneous miscarriage helps to estimate recurrence risks in future pregnancies, and when an anomaly is found this is useful information to provide when counselling parents.</p>	

<p>稿件編號： 007</p>	<p>夫妻雙方皆為地中海貧血帶原之胎兒產前評估及診斷 The prenatal examination and fetal evaluation for the thalassemia carrier parents</p>
<p>臨時收件編號： 2868</p>	<p><u>蔡明珠</u> 陳俐瑾 蔡明松 國泰綜合醫院</p>
<p>論文發表方式： 口頭報告</p>	<p>Introduction: Thalassemia, an inherited blood disorder, common monogenic disorder in Taiwan, the carrier prevalence rate is about 6% in 2016 database. The subtypes of thalassemia are classified according to the impaired globin chains and whether this disorder leads to reduced production of a normal chain or an abnormal tertiary structure of globin chains.</p>
<p>論文歸類： 產科</p>	<p>In this manuscript, we presented a case that underwent the routine blood examination at the first trimester when she had her first baby and found she was a thalassemia alpha- type carrier, when her spouse received the blood examination and disclosed he was a combination of alpha- and beta- type thalassemia carrier. The fetus revealed an alpha- thalassemia carrier.</p> <p>Conclusions: For the thalassemia carrier pregnancy woman, it is important to find out if both parents carry the same type of gene, then there is a 25% chance that the child will have severe Thalassemia, which will require lifelong blood transfusion or bone marrow transplantation to sustain life, resulting into physical, mental, economic and social burden to the patient and family. Throughout the completed prenatal examination and genetic counselling services, we can have the sufficient preparation to take action for different decisions made by the parents.</p>

<p>稿件編號： 008</p>	<p>在常規子宮頸長度篩檢後行子宮頸環紮手術或許可以延長子宮頸短的雙胞胎妊娠 時間：回溯性世代研究</p>
<p>臨時收件編號： 3066</p>	<p>Cervical Cerclage for Short Cervix in Twin Pregnancy after a Midtrimester Cervical Length Screening May have a Longer Gestation: a Retrospective Cohort Study</p> <p><u>邵芷萱</u>¹ 宋展毓² 葉長青¹ Ksenia Olisova² 張東曜² 王鵬惠¹ 台北榮民總醫院婦女醫學部¹ 台兒診所²</p>
<p>論文發表方式： 口頭報告</p>	<p>Early studies had failed to demonstrate the benefits of mid-trimester cerclage compared to expectant management, but some successful results have also been reported in recent studies. Between 2008 and 2018, a total of 1998 women with twin pregnancies underwent routine midtrimester screening including transvaginal cervical length measurement at gestational age 20-24 weeks in Taiji Clinic. There was 3% of the population with cervix less than 2cm. Demographic data, pregnancy outcomes, time interval between the operative procedure and delivery were also recorded and analyzed. Women had a mean age of 34.08 years. There were 75.8% nulliparous women. There was 15 women underwent emergent cerclage after midtrimester antepartum examination. 26 of all population were found with short cervix less than 2cm. 8 of them underwent emergent cerclage and the 18 left underwent expectant management. The mean gestational age at delivery was 30 vs 33 weeks (p=0.04). The range of prolongation period between cerclage and delivery was 6-12 weeks. One infant died at day 11 of NICU admission and one IUFD was recorded. There was no extremely premature delivery at 24th weeks in cerclage group but 6 out of 18 women delivered before 24 weeks in observation group. High risk patients with short cervix were included and evaluated the efficacy and outcomes of emergent cerclage in midtrimester in twin pregnancies. Although sample size was small to make accurate recommendation, in our study, prospering outcomes supported this intervention. Emergent cervical cerclage should be an option for carefully selected patients with cervical shortening.</p>
<p>論文歸類： 產科</p>	<p>Early studies had failed to demonstrate the benefits of mid-trimester cerclage compared to expectant management, but some successful results have also been reported in recent studies. Between 2008 and 2018, a total of 1998 women with twin pregnancies underwent routine midtrimester screening including transvaginal cervical length measurement at gestational age 20-24 weeks in Taiji Clinic. There was 3% of the population with cervix less than 2cm. Demographic data, pregnancy outcomes, time interval between the operative procedure and delivery were also recorded and analyzed. Women had a mean age of 34.08 years. There were 75.8% nulliparous women. There was 15 women underwent emergent cerclage after midtrimester antepartum examination. 26 of all population were found with short cervix less than 2cm. 8 of them underwent emergent cerclage and the 18 left underwent expectant management. The mean gestational age at delivery was 30 vs 33 weeks (p=0.04). The range of prolongation period between cerclage and delivery was 6-12 weeks. One infant died at day 11 of NICU admission and one IUFD was recorded. There was no extremely premature delivery at 24th weeks in cerclage group but 6 out of 18 women delivered before 24 weeks in observation group. High risk patients with short cervix were included and evaluated the efficacy and outcomes of emergent cerclage in midtrimester in twin pregnancies. Although sample size was small to make accurate recommendation, in our study, prospering outcomes supported this intervention. Emergent cervical cerclage should be an option for carefully selected patients with cervical shortening.</p>

<p>稿件編號： 009</p>	<p style="text-align: center;">第一孕期鎂離子運輸基因表現與妊娠期間血糖之相關性 Association of magnesium transporter gene expression in the first trimester and gestational blood glucose levels</p>
<p>臨時收件編號： 2899</p>	
<p>論文發表方式： 口頭報告</p>	<p>Objective: To determine whether magnesium (Mg²⁺) transporter gene expression levels in the first trimester of pregnancy is associated with glucose intolerance or gestational diabetes mellitus (GDM).</p>
<p>論文歸類： 產科</p>	<p>Materials and Methods: This is a prospective case series evaluating magnesium gene expression levels in 181 pregnant women from November 2015 to April 2018. Total RNA was extracted from blood samples of the pregnant women in the first trimester and then reverse transcribed to cDNA. The expression levels of five Mg²⁺ transporter genes (SLC41A1, CNNM2, MagT1, TRPM6, and TRPM7) were determined by quantitative real-time PCR. The expression levels were then compared with non-pregnant women as control for further statistical analysis.</p> <p>Results: Out of the 181 pregnant women in our study, 65 were nulliparous and 116 were multiparous, with an average age of 33 years old. All the subjects in our study received the one-step 75g oral glucose tolerance test during 24 to 28 weeks of gestation. We observed that the gene expression levels of MagT1 and TRPM7 in the first trimester were negatively correlated with the 1-hour blood glucose level (p</p> <p>Conclusions: This study analyzed the correlation between the expression levels of different Mg²⁺ transporter genes in the first trimester and impaired glucose tolerance or gestational diabetes mellitus. We showed that the decrease in the expression level of MagT1 was correlated to the incidence of GDM (p=0.01). Whether or not the expression level of this Mg²⁺ transporter gene in the first trimester may be used as a predictor of glucose intolerance or GDM is a field to be explored in the future.</p>

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<p>稿件編號： OO10</p>	<p>雙胞胎之生產途徑：一區域醫院之六年回溯性研究 Route of delivery in twin pregnancy: a retrospective 6 year study in a single institute</p>
<p>臨時收件編號： 2877</p>	<p>陳瑤¹ 呂佳澍² 鄭進和² 童寶玲^{1,2} 台大醫院¹ 台大醫院新竹分院²</p>
<p>論文發表方式： 口頭報告</p>	<p>Aim: Cesarean delivery is a major route of delivery in twin pregnancy nowadays. In this retrospective study, we aim to analyze the selection criteria, the maternal, perinatal, and fetal outcome in twin fetus delivered by different route of delivery.</p>
<p>論文歸類： 產科</p>	<p>Patients and methods: From Nov, 2013 to Sep, 2019, vital twin pregnancies at over 31 weeks of gestation delivered in National Taiwan University Hospital Hsin-Chu Branch were included. Charts were reviewed for prenatal conditions and postpartum outcomes.</p> <p>Outcome: 96 twins were included and 43.8% were given birth by vaginal delivery. The average age of women received vaginal delivery was significantly younger (32.7 ± 4.2 years versus 34.8 ± 4.9 years, $p < 0.03$) than women receiving cesarean delivery. There were more multiparity (31.0% versus 13.0%), less prenatal complications (such as pregnancy induced hypertension, pre-eclampsia and gestational diabetes) (16.7 versus 35.2%), more twins with vertex-vertex presentation (61.9% versus 35.2%) in vaginal delivery compared with cesarean section. However, there was more non-vertex second twin in vaginal delivery than cesarean section (38.1% versus 20.4%). There was no conversion from vaginal delivery to cesarean section. After delivery, there were no differences in birth weights in both the first and the second twins in both group. However, there was one case of Apgar score below 5 in Twin A in the cesarean group and one case of Apgar score below 5 in Twin B in the vaginal group. The estimated blood loss was significantly higher in the cesarean group than the vaginal group (837.7 ± 666.8 ml versus 216.7 ± 176.9 ml, $p < 0.05$). There were no differences in other maternal complications.</p> <p>Conclusions: Vaginal delivery could be safely performed in twin pregnancy with the additional benefits including less bleeding amount and better recovery than Cesarean section.</p>

<p>稿件編號： OO11</p>	<p style="text-align: center;">胎盤間質幹細胞分泌 Slit2 調控巨噬細胞活動 Human placental multipotent mesenchymal stromal cells-derived Slit2 regulates macrophage motilities</p>
<p>臨時收件編號： 2891</p>	
<p>論文發表方式： 口頭報告</p>	<p>Objective: The Slit proteins previously recognized as axonal repellents activate various intracellular signaling by binding their cognate Robo receptors. The role of Slit2 in the placental villous microenvironment has not been explored. We hypothesized that Slit2 expressed by human placental multipotent mesenchymal stromal cells (hPMSCs) involved in macrophage motility during placental inflammation via Robo receptor signaling.</p>
<p>論文歸類： 產科</p>	<p>Methods: hPMSCs isolated from term placentas and mouse macrophage RAW 264.7 cells were used as cell model. Lipopolysaccharide (LPS), Slit2 protein and hPMSC-conditioned medium with or without Slit2 depletion were used to stimulate macrophages. Slit2 and Robo interaction was studied by co-immunoprecipitation. The macrophage cell activation and motilities were measured.</p> <p>Results: hPMSCs express Slit2. Robo4 was highly expressed in RAW 264.7 macrophages. The expression of Robo1 and Robo4 was not altered by LPS or Slit2 stimulation in macrophages. Slit2 interacted with Robo4. Slit2 increased adhesion and inhibited migration of macrophages. hPMSC-conditioned medium enhanced the macrophage adhesion but inhibited its migration induced by LPS. LPS increased the macrophage expression of CD11b and CD18, which was inhibited by Slit2 or hPMSC-conditioned medium but not by conditioned medium after Slit2 depletion. LPS induced the phosphorylation of p38 and Rap1 activation in macrophages, which was suppressed by Slit2 or hPMSC-conditioned medium treatment but not with conditioned medium after Slit2 depletion. The p38 phosphorylation and Rap1 activation induced by LPS was attenuated by Slit2, p38siRNA or hPMSC-conditioned medium treatment but not with conditioned medium after Slit2 depletion. Furthermore, Rap1 expression was inhibited by p38siRNA, indicating Rap1 is a downstream effector of p38 signaling. The p38 siRNA reduced LPS-induced CD11b and CD18 expression in RAW 264.7 cells, which further increased LPS-induced cell adhesion but inhibited the LPS-induced cell migration.</p> <p>Conclusions: hPMSC-conditioned medium-derived Slit2 inhibited the p38-Rap1 signaling and expression of CD11b and CD18 in macrophages induced by LPS, which in turn decreased migration and increased adhesion in macrophages.</p>

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稿件編號： OO12	<p style="text-align: center;">探討 O-linked N-acetyl-glucosamine 於子癩前症之胎盤的表現量分析</p> <p style="text-align: center;">The expression of O-GlcNAcylation and O-GlcNAc cycling enzymes in placenta and the role in preeclampsia</p>
臨時收件編號： 2682	
論文發表方式： 口頭報告	<p>The O-GlcNAcylation, which O-linked N-Acetylglucosamine (O-GlcNAc) attached to serine (Ser) and threonine (Thr) residues of nucleocytoplasmic and mitochondrial proteins is a post-translation modification. The O-GlcNAcylation process is reversible and controlled by O-GlcNAc transferase (OGT), which adds O-GlcNAc to target proteins and O-GlcNAcase (OGA), which hydrolytically removes the saccharide. The dysregulation of O-GlcNAcylation contributes to the pathogenesis of vascular dysfunction via production of reactive oxygen species.</p>
論文歸類： 產科	<p><u>游舒涵</u>¹ 顏志峰¹ 施景中² 黃敏銓³</p> <p>¹ 林口長庚紀念醫院婦產部 ² 國立台灣大學醫學院附設醫院婦產部 ³ 台大醫學院解剖學暨細胞生物學研究所</p> <p>Preeclampsia is a maternal syndrome of hypertension with proteinuria or organ dysfunction after 20 weeks of gestation, which contributes to poorer maternal and fetal outcomes. In preeclampsia, the pathophysiology was placental oxidative stress, which lead to hypoxia trophoblast, poorly developed fetoplacental vasculature, impaired placental villous angiogenesis, and vascular endothelial cell injury. However, our understanding of the O-GlcNAcylation in placental hypoxia stress in preeclampsia is limited. Therefore, our aim of this study is to elucidate O-GlcNAcylation and the cycling enzymes of OGT and OGA in human preeclampsia and non-preeclampsia placenta by immunohistochemistry and western blot analysis. The results showed that O-GlcNAcylation as well as OGT and OGA expressions were significantly elevated in preeclampsia placenta, especially on decidual cell, extra-villous trophoblast, and syncytiotrophoblast compared with the gestational age-matched non-preeclampsia placenta. Besides, the O-GlcNAcylation and OGT protein were up-regulated associated with increased gestational age in non-preeclampsia group. In conclusion, O-GlcNAcylation in placenta might play a modulated role in decidualization or trophoblast invasion in preeclampsia.</p>

稿件編號： OO13	在妊娠糖尿病併有生長過大胎兒之孕期中，發現胎盤細胞減少細胞凋亡及細胞自噬之現象 Decreased placental apoptosis and autophagy in pregnancies complicated by gestational diabetes with large-for-gestational age fetuses <u>林孟萱</u> ¹ 洪泰和 ^{1,2,3} 陳思甫 ⁴ 謝燦堂 ¹ 長庚醫療財團法人台北長庚紀念醫院婦產部 ¹ 長庚醫療財團法人基隆長庚紀念醫院婦產部 ² 長庚大學醫學院 ³ 振興醫療財團法人振興醫院復健醫學部 ⁴
臨時收件編號： 2818	
論文發表方式： 口頭報告	Dysregulation of placental apoptosis and autophagy are observed in pregnancy complications including preeclampsia and fetal growth restriction. However, studies of their changes in the placentas of women with gestational diabetes mellitus (GDM) show inconsistent results. We aimed to compare the changes in apoptosis, autophagy, and Bcl-2 family proteins in the placentas from women with normal pregnancies and those with GDM, with or without large-for-gestational age (LGA) infants and to investigate the effect of hyperglycemia on the changes in apoptosis, autophagy, and Bcl-2 family proteins in primary cytotrophoblastic cells.
論文歸類： 產科	

稿件編號： OO14	<p style="text-align: center;">急性絨毛羊膜炎之孕婦妊娠組織中可溶性環氧水解酶的增加 Increased soluble epoxide hydrolase in human gestational tissues from pregnancies complicated by acute chorioamnionitis</p> <p>洪敏文¹ 洪泰和^{1,2,3} 陳思甫⁴ 謝燦堂¹ 長庚醫療財團法人台北長庚紀念醫院婦產部¹ 長庚醫療財團法人基隆長庚紀念醫院婦產部² 長庚大學醫學院³ 振興醫療財團法人振興醫院復健醫學部⁴</p>
臨時收件編號： 2817	
論文發表方式： 口頭報告	<p>Chorioamnionitis (CAM) is primarily a polymicrobial bacterial infection involving chorionic and amniotic membranes that is associated with increased risk of preterm delivery. Epoxyeicosatrienoic acids (EETs) are eicosanoids generated from arachidonic acid by cytochrome P450 enzymes and further metabolized mainly by soluble epoxide hydrolase (sEH) to produce dihydroxyeicosatrienoic acids (DHETs). As a consequence of this metabolism of EETs, sEH reportedly exacerbates several disease states ; however, its role in CAM remains unclear. The objectives of this study were to: (1) determine the localization of sEH and compare the changes it undergoes in the gestational tissues (placentas and fetal membranes) of women with normal term pregnancies and those with pregnancies complicated by acute CAM ; (2) study the effects of lipopolysaccharide (LPS) on the expression of sEH in the human gestational tissues ; and (3) investigate the effect of 12-[3-adamantan-1-yl-ureido]-dodecanoic acid (AUDA), a specific sEH inhibitor, on LPS-induced changes in 14,15-DHET and cytokines such as interleukin (IL)-1 and IL-6 in human gestational tissues in vitro and in pregnant mice. We found that women with pregnancies complicated by acute CAM had higher levels of sEH mRNA and protein in fetal membranes and villous tissues compared to those in women with normal term pregnancies without CAM. Furthermore, fetal membrane and villous explants treated with LPS had higher tissue levels of sEH mRNA and protein and 14,15-DHET than those present in the vehicle controls, while the administration of AUDA in the media attenuated the LPS-induced production of 14,15-DHET in tissue homogenates and IL-1 and IL-6 in the media of explant cultures. Administration of AUDA also reduced the LPS-induced changes of 14,15-DHET, IL-1 , and IL-6 in the placentas of pregnant mice. Together, these results suggest that sEH participates in the inflammatory changes in human gestational tissues in pregnancies complicated by acute CAM.</p>
論文歸類： 產科	

稿件編號： OO15	懷孕期間使用低分子量肝素的好處及安全性-回溯單一醫學中心三年的使用經驗 The safety and benefit of low molecular weight heparin use during pregnancy: three-year-experience in a medical center
臨時收件編號： 2873	陳怡婷 ¹ 吳琬如 ¹ 蔡鴻德 ¹ 陳明 ¹ 彰化基督教醫院婦產部
論文發表方式： 口頭報告	Objective:Low molecular weight heparin has been in widespread use during pregnancy for various indications. In our experience, anti-coagulation therapy is of benefit to women with recurrent pregnancy loss who had documented sole protein S deficiency. However, we also applied the treatment in women with other etiologies including pregnancy loss with autoimmune disease, history of placental insufficiency and recurrent in vitro fertilization failure. This study, we enrolled this cases to analyze the benefit and fetomaternal complications of the treatment.
論文歸類： 產科	Methods:The study retrospectively reviewed those women who received LMWH during or before pregnancy between Jan 2016 and May 2019 in Changhua Christian Hospital. We hypothesized that: 1) LMWH use during pregnancy is associated with risk of postpartum hemorrhage ; and 2) Protein S or autoimmune disease would be the contributor to maternal or fetal morbidity included preeclampsia, antepartum hemorrhage, placenta abruption, preterm labor or small gestational age. To test the hypothesis, the study aimed to evaluate PPH at livebirth with and without heparin using the Proportion Z-Tests ; to examine relationship between Protein S (or AID) and maternal or fetal morbidity using Chi-square test, to identify the risk factors affecting failure to pregnancy using a binary regression analysis. Results: 218 women before or during pregnancy were treated with LMWH. 69.3% of these patients had history of recurrent pregnancy loss, 60.1% with protein S deficiency, 12.8% with antiphospholipid syndrome and 8.7% with autoimmune diseases. LMWH is of benefit to women with protein S deficiency that related to higher live birth rate (RR: 0.21, 95%CI=0.09-10.67). For the women who got pregnant, the women underlying with autoimmune diseases may have the risk of preterm labor. (P value: 0.011) As for the fetomaternal complications, there was no difference between protein S deficiency and AID on the risk of maternal or fetal morbidity included preeclampsia, antepartum hemorrhage, placenta abruption, preterm labor or SGA. Conclusions: According to the cohort study, women with protein S deficiency who treated with LMWH had a higher live birth rate compared to other factors. Women who treated with LMWH during pregnancy have no significantly increased the risk of postpartum hemorrhage. Besides, no evidence declared that women treated with LMWH would lead to maternal or fetal morbidity according to our experience till now.

<p>稿件編號： OO16</p>	<p>應用產前超音波與核磁共振診斷胎兒腸道發育異常 Application of prenatal ultrasound and fetal MRI to detect bowel abnormalities</p>
<p>臨時收件編號： 3376</p>	<p>李佩芳¹ 許德耀¹ 蔡慶璋¹ 鄭欣欣¹ 賴韻如¹ 曾亮節² 高雄長庚紀念醫院婦產部¹, 高雄長庚紀念醫院放射診斷部²</p>
<p>論文發表方式： 口頭報告</p>	<p>Background: Ultrasound plays an important role of initial prenatal diagnosis of bowel abnormalities, and fetal MRI has been established as a complementary tool.</p>
<p>論文歸類： 產科</p>	<p>Method: We reviewed 183 cases performed fetal MRI at Kaohsiung CGMH from 2007-2019, 26 cases suspected with bowel abnormalities by prenatal ultrasound initially, presenting as bowel dilatation, abdominal cysts, with or without polyhydramnios, and all cases followed by fetal MRI for confirmed diagnosis. Retrospectively, we searched from medical records of maternal age, underlying diseases, gestational age at diagnosis and delivery, bowel dilatation diameters, and chromosome study. We analyzed the consistency of bowel abnormalities diagnosis between US and fetal MRI, and MRI accuracy compare to final diagnosis. Results: - The mean maternal age is 33y/o, diagnostic gestational age at week 28, delivery age at week 36, 4 cases (20%) with GDM, 2 cases (10%) with thyroid goiter, 8 cases had undergone chromosome study and all revealed normal karyotyping. - Finally, 20 of 25 (80%) cases suspected bowel abnormalities by MRI, 5 with non-specific findings, 1 failure because of fetal movement. - 13/20 (70%) cases suspected bowel obstruction, 2 at pylorus, 4 at duodenum, 3 at jejunum, 1 at distal ileum, 4 at colon-rectal, 4/20 (20%) combined with multiple anomalies, 1/20(5%) rectal duplication cyst, 1/20(5%) mesentery origin cyst, 1/20(5%) anterior aspect abdominal cyst. - In 20 cases with bowel abnormalities impressed by MRI, and excluded 3 IUFD cases without autopsy, 12/17 cases (70%) compatible with postnatal diagnosis. Conclusion Fetal MRI is a good modality of prenatal diagnosis, and complement for ultrasound to differentiate the level of bowel abnormalities, allowing us to plan postnatal management.</p>

<p>稿件編號： 0017</p>	<p>孕產婦使用含糖飲料之行為探討 An Investigation of Sugar-sweetened Beverages Consumption in Pregnant Women</p>
<p>臨時收件編號： 3408</p>	<p><u>葛菁如</u>¹ 王詩涵¹ 詹德富¹ 高雄醫學大學附設醫院婦產部¹</p>
<p>論文發表方式： 口頭報告</p>	<p>Introduction</p> <p>It has been well established in literature that human eating behaviors change in response to emotions or life stress. Patients in their depressive episodes are found to consume more sweetened foods. However, rarely have studies been conducted in pregnant women, who are confronted with a substantial physical and emotional stress by carrying a child. This study aims to investigate sugar-sweetened beverages consumption behaviors in pregnant women and their clinical implications.</p>
<p>論文歸類： 產科</p>	<p>Method</p> <p>A prospective cohort study was conducted at Kaohsiung Medical University Hospital since August 2018. One hundred sixty-three pregnant women aged 20 and above were recruited to answer a 10-minute questionnaire with serum samples drawn to assess their metabolic profile at each trimester. Cord blood was also collected at delivery. Data collected included basic demographic data, underlying conditions, personal hygiene behaviors, diet choices, activity levels, sugar-sweetened beverage (SSB) consumption amount, frequency and types, in addition to emotional stress using Edinburg Postnatal Depression Scale (EPDS). Statistical analysis was performed to find correlation between SSB consumption, motives and pregnancy outcomes.</p> <p>Results and Discussion</p> <p>Preliminary results found that pregnant women with higher EPDS scores consume significantly more sugar-sweetened beverages. Accordingly to Social Baseline Theory (SBT), psychosocial stress such as lack of emotional support increases carbohydrate metabolism. EPDS is a validated tool for assessing the degree of distress faced by pregnant women for it acts as a screening tool with severity scale, but not a definite diagnostic criterion for depression. Further investigation for the sources of emotional distress in these women is warranted: whether it is physical discomfort, emotional support, insecurity or active awareness of more restrains on healthy lifestyles. Detailed data analysis, clinical case presentation and a review of literature will be presented.</p>

<p>稿件編號： OO19</p>	<p>探討早發性產後憂鬱症之相關因子 Factors associated with early postpartum depression among Chinese women</p>
<p>臨時收件編號： 2870</p>	<p>林芸卉 陳治平 王國恭 陳宜雍 王亮凱 陳震宇 台北馬偕紀念醫院婦產部</p>
<p>論文發表方式： 口頭報告</p>	<p>Objective: Postpartum depression (PPD) could occur in women soon after giving birth. The aim of this study was to investigate contributing factors for early PPD among Chinese women.</p>
<p>論文歸類： 產科</p>	<p>Materials and Methods: This is a retrospective cohort study of pregnant women with term delivery at a tertiary referral center in Taiwan from August 2018 to October 2019. The Edinburgh Postnatal Depression Scale (EPDS) was used to measure early PPD within 48 hours after delivery. An EPDS cutoff score of 10 was used as an indication for clinically significant PPD. Chi-square test, ANOVA test, and Pearson’s correlation analysis were used to detect significant differences between non-PPD and PPD groups.</p> <p>Results: The incidence of women with early PPD was 9.1% (118/1296). A positive correlation with early PPD was noted in miscarriage history ($r = 0.099, p = 0.002$), gestational hypertension ($r = 0.094, p = 0.004$), cesarean delivery ($r = 0.140, p < 0.001$), admission for tocolysis ($r = 0.066, p = 0.042$), and neonatal intensive care unit admission ($r = 0.112, p = 0.001$). However, a negative correlation with early PPD was noted in gestational age ($r = -0.69, p = 0.035$), breastfeeding ($r = -0.099, p = 0.002$), husband accompanying at childbirth ($r = -0.148, p < 0.001$), and skin-to-skin contact immediately after birth ($r = -0.094, p = 0.004$).</p> <p>Conclusion: Breastfeeding, husband accompanying at childbirth, and skin-to-skin contact immediately after birth are helpful to decrease early PPD.</p>

稿件編號： OO20	<p style="text-align: center;">腹腔鏡手術與胎兒不良結果風險增加相關：回顧性病例對照研究 Laparoscopy is associated with an increased risk of fetal adverse outcome: a retrospective population-based case-control study</p>
臨時收件編號： 2864	
論文發表方式： 口頭報告	<p>Objective: To assess fetal adverse outcomes of pregnancies following laparoscopic abdominal surgery.</p> <p>Material and methods: Retrospective nationwide case-control study of women who got pregnant for the first time between 2000 to 2012 in Taiwan. The study consisted of 208,604 cases with fatal adverse and 417,124 controls. Participants who underwent appendectomy, cholecystectomy, ovarian cystectomy or myomectomy surgery would treated by either laparoscopy or laparotomy.</p> <p>Results: Women who underwent either laparotomy (aOR=3.02 ; 95%CI=2.57-3.54) or laparoscopy (aOR=7.26 ; 95%CI=5.90-8.93) had significantly higher risk of fatal adverse than who had never underwent both laparotomy and laparoscopy. Women who underwent laparoscopy had significantly higher risk of fatal adverse (aOR=2.44 ; 95%CI=1.87-3.19) compared with women who underwent laparotomy. There are significantly association between fatal adverse and laparotomy among women aged less than 20 years (aOR=5.39 ; 95%CI=2.60-11.2). Furthermore, women who have pelvic inflammatory disease also had significantly higher risk of fatal adverse (P</p> <p>Conclusion: In pregnant women who underwent laparoscopic surgery have significantly higher fetal adverse events than who underwent laparotomy. There is significantly association between fetal adverse events and comorbidities, especially pregnant women with pelvic inflammatory disease. Women who underwent laparotomy and aged less than 20 years have more significantly fetal adverse.</p>