

been obtained regarding management of decidual polyp during pregnancy. We follow up conservatively without excision when we diagnose decidual polyp. In this study, we report the perinatal events of the pregnancy complicated with decidual polyp that occurred.

Methods: This retrospective study included patients with pregnancy complicated with decidual polyp in our hospital between January 2016 and June 2019. We investigated the perinatal events including the rate of preterm delivery, gestational age of diagnosis of decidual polyp, cervical length shortening, cervical cerclage, and hospitalization due to threatened premature labor.

Results: During the study period, total of 20 women had diagnosed pregnancy complicated decidual polyp, and 1 case was spontaneous abortion at 13 weeks of gestation, 10 cases delivered prematurely. The median value of gestational age on diagnosis of decidual polyp was 9 weeks (6–18 weeks), and gestational age on delivery was 36 weeks (26–39 weeks). Cervical cerclage was performed in 13 cases with shortened cervix before 25 weeks of gestational age. 2 cases delivered before 28 weeks of gestational age with shortened cervical length without cervical cerclage. There were no cases with intrauterine infection after cervical cerclage.

Conclusion: Pregnancy complicated with decidual polyp may associate with premature delivery with shortened cervical length, and cervical cerclage may be effective.

45.

ADVERSE EFFECTS OF ENDOMETRIOSIS ON PREGNANCY

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Objective: Pregnancy outcome of pregnant women who had endometriosis remains unknown. The aim of this study is to evaluate the obstetrical complications and neonatal outcomes among pregnant women with endometriosis.

Methods: This was a retrospective case-control cohort study from 2010 to 2017. Maternal obstetric complications and neonatal outcomes were compared between endometriosis group (n = 80) and control group (n = 2,689).

Results: The several characteristics were significantly different in maternal age (34.2 vs 32.9 years), the percentages of primiparity (83.8% vs 54.7%) and ART (28.7% vs 12.8%) between the two groups. There were no significant differences in the proportions of preterm birth, small for gestational age and placental abruption. Neonatal outcomes including birth weight, Apgar score and NICU admission in the endometriosis group were also similar to those in the control group. The proportion of placenta previa in the endometriosis group (10/80) was higher than that in control group (109/2,689). In multivariate analysis, endometriosis significantly increased odds for placenta previa (aOR 3.19, 95% CI [1.56–6.50]).

Conclusion: Our results suggested that endometriosis might be an independent risk factor for placenta previa. The pathological mechanisms remain unknown, but severe endometriosis that was required to surgical treatment for pain or infertility might be associated with pathology of placental previa.

46.

REGULATION AND ROLE OF PROGESTERONE RECEPTOR MEMBRANE COMPONENT 1 (PGRMC1) IN ENDOMETRIAL STROMAL CELL DECIDUALIZATION

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Objective: Human endometrial stromal cells (ESCs) differentiate into decidual cells, called as decidualization during the mid-secretory phase of the menstrual cycle. Progesterone (P4) induces decidualization via the binding to its classical receptor PGR. PGR membrane component 1 (PGRMC1), a P4 binding protein has been suggested to be involved in P4

action. In this study, we examined the regulation and role of PGRMC1 in ESCs decidualization.

Methods: Expression of PGRMC1 was examined in the proliferative and secretory phases of endometrium by immunohistochemistry. Primary cultured ESCs were stimulated with P4 and dibutyl (db)-cAMP to induce decidualization. The microRNA which regulates PGRMC1 was explored in ESCs. Furthermore, the effects of siRNA-mediated knockdown and an inhibitor (AG-205) of PGRMC1 on the expression of decidual markers (IGFBP-1 and prolactin) were evaluated by qRT-PCR.

Results: PGRMC1 was expressed in glandular epithelial and stromal cells of the endometrium throughout the menstrual cycle, but their expression was decreased in the secretory phase. PGRMC1 expression was down-regulated in P4 and db-cAMP-stimulated decidual ESCs. Transfection of miR-98 mimic into ESCs repressed PGRMC1 expression. In contrast to PGRMC1, miR-98 expression was increased in P4 and db-cAMP-stimulated decidual cells. Knockdown and inhibition of PGRMC1 significantly enhanced decidualization.

Conclusion: These findings suggest that secretory phase-specific down-regulation of endometrial PGRMC1 regulated by miR-98 may promote decidualization for the establishment of pregnancy.

47.

GENETIC ANALYSIS OF FOUR PLACENTAL MESENCHYMAL DYSPLASIA CASES

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Placental mesenchymal dysplasia (PMD) is a rare condition that is characterized by placentomegaly and stem villi vessels dilation. Although androgenetic/biparental mosaicism or chimerism has been reported in PMD, evidence regarding its etiologic significance in PMD is scarce. Here we analyzed the genetic composition in four PMD cases and the correlation between genetic composition and placental morphology.

During 2007–2019, PMD was diagnosed in five patients based on prenatal ultrasonographic appearance of the placenta and confirmed by placental histology after delivery. Four of the five cases were examined for genetic composition by short tandem repeat (STR) genotyping and karyotyping and included in the analysis. No congenital malformation was observed.

Ultrasonography showed placental multicysts in the first or early second trimester, and the number of cysts tended to decrease with the advancement of pregnancy (case #1). The histological changes in mesenchymal vessels were modest in one placenta (case #1) that was delivered at term. Karyotyping revealed 47,XXY/47,XY,+13 mosaicism in one placenta (case #2). STR analysis of the placental tissues revealed one biparental mosaicism of two (case #1), one biparental mosaicism of at least three (case #2), and two biparental cells without mosaicism (case #3, #4). Four loci of case #2 were presumed to be uniparental origins, one paternal and three maternal. We detected mosaicism of biparental diploid cells in two cases. We also did not find any correlation between the ultrasonographic appearance of the placenta and genetic abnormality.

48.

ANTENATAL PLACENTAL PATHOLOGICAL ASSESSMENT USING SUPERB MICRO-VASCULAR IMAGING (SMI)

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Superb Micro-vascular Imaging (SMI; Canon Medical Systems, Tokyo) is a new blood flow imaging technique which analyzes the characteristics of clutter motion and uses a new adaptive algorithm to identify and remove tissue motion and reveal the true blood flow. Therefore, compared to conventional blood flow imaging, SMI can significantly visualize low-velocity blood flow in small vessels. Therefore, we considered SMI technique was particularly valuable in placental assessment during pregnancy. In our research, comparing ultrasound findings using SMI with placental histological findings after delivery, it is demonstrated that histological findings including congestion of villous stem vessels, placental infarction, increase