simple total hysterectomy. We submitted the removed uterus and placenta for pathological examination, and it was confirmed that the placenta was mature.
The postoperative course was satisfactory, and the patient was discharged on postoperative day 6. Prior to discharge, we reconfirmed with her that there had been heavy genital bleeding and that we had not noticed any fetus-like tissue. We also explained to the patient that it was necessary for us to contact the relevant authorities just in case the child is found in the future, and other circumstances. After that, on discussing the situation with police, the police filed this case as a criminal offense as a case of abandonment of a corpse.
Discussion: Because placenta-like tissue was observed using a speculum even though the patient did not mention that she had been pregnant and had given birth, we had difficulty deciding on the course of action. In criminal cases, one may encounter unusual findings. Although a more detailed record is desirable, physicians are also bound by a duty of confidentiality and are expected to maintain a neutral position. In this particular case, in light of the information collected from the patient by a midwife, rather than reporting the matter to the local police we worked directly with the prefectural police headquarters and asked them to give consideration to the social background of the patient. Although incidents of abandonment of newborn babies after birth are not unusual, health professionals must have the tact to be able to deal with such situations calmly, as retained placenta may in some cases serve as direct evidence of pregnancy and birth.

41.
DRUG REPOSITIONING FOR SEARCH THE DRUG TO SUPPORT TROPHOBLAST CELL

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Objectives: Fetal growth restriction(FGR) is associated with morbidity of neonatal mortality and complications. However, no effective treatment has been established. In recent years, infiltration failure of extravillous trophoblast cells (EVT) in the remodeling process of the uterine spiral artery is thought to be result in poor placentation, which is one of causes of FGR or preeclampsia. In this study, drugs with possibility of improvement effect of FGR were screened using cell based drug repositioning strategy.
Methods: A commercially available compound library (FDA approved) was used for screening. Compounds were investigated in the effect on proliferation, invasion and placental growth factor (PlGF) production. Bewo, a choriocarcinoma cell line, was used for a model of cytotrophoblasts, and the effect of compounds on proliferation and PlGF secretion was assessed in BeWo. HTR-8/SVneo, as a model of EVT, was used to evaluate the effect of invasive ability. Some compounds were reassessed in proliferation using isolated cytotrophoblast cell derived from term placenta.
Results: Approximately 20 compounds with effective for placental growth were identified by evaluating the proliferative activity, invasive ability and PlGF productivity of those cells. The compound including cardiovascular, hormone, antibacterial and central nervous system drugs, were included. Some compounds indicate proliferative activity in primary cytotrophoblast cells.
Conclusion: We identified multiple compounds that might regulate the function of EVT and cytotrophoblasts. Those compounds would improve placental development and prognosis of FGR, although further investigation is required.

42.
LIGHT ELEVATION LEADING TO SFLT-1 OVERPRODUCTION IMPLIES THE PATHOGENIC LINK BETWEEN HYDATIDIFORM MOLE AND PREECLAMPSIA

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Background: Hydatidiform mole (HM) is known to pose a high risk of early-onset PE if the pregnancy continues with the moles left untreated. Although elevated soluble fms-like tyrosine kinase-1 (sFlt-1) in HM patients has been reported, the pathogenic mechanisms of PE secondary to HM remain unknown. TNF superfamily cytokine, LIGHT, is known to contribute to the pathogenesis of PE. The aim of our study is to investigate the pathogenic mechanism in HM related to subsequent PE development by focusing on LIGHT.
Methods: 17 women with complete HM (CHM) and 20 gestational-age-matched normal pregnant women (control) were included. Serum LIGHT and sFlt-1 levels were measured by ELISA. Expression of LIGHT and sFlt-1 in the placentas of CHM and control was analyzed by immunohistochemistry (IHC). HTR-8/Sv-neo cells and human primary syncytiotrophoblast (SCT) cells were stimulated with LIGHT.
Results: Both serum LIGHT and sFlt-1 levels were significantly higher in CHM than control. The serum levels of LIGHT were positively correlated with those of sFlt-1 in CHM ($r=0.68$, $p=0.0029$). IHC demonstrated that LIGHT expression was increased in CHM placentas as compared with controls, and LIGHT and sFlt-1 were co-localized in the trophoblast cells of CHM. Moreover, we found that LIGHT directly induced sFlt-1 expression in HTR-8/Sv-neo cells and primary SCT cells.
Conclusions: Our results suggest that increased LIGHT underlies sFlt-1 elevation in HM, which indicates the importance of LIGHT in the pathogenic mechanisms of early-onset PE developing secondary to HM.

43.
MONOCHORIONIC DIZYGOTIC OPPOSITE-SEX TWINS WITH TWIN ANEMIA-POLYCYTHEMIA SEQUENCE AND BLOOD CHIMERISM

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Introduction: Monochorionic Dizygotic Twins (MCDZ twin) shares one placenta despite of their dizygosity. They have genetical problems arising from blood chimerism as well as perinatal risks. We report the case of Monochorionic Dizygotic Opposite-Sex Twins with Twin Anemia-Polycythemia Sequence and Blood Chimerism.
Case: A 30 years old woman who had gotten pregnant by ovulation induction and diagnosed as DD twin. However, after the delivery at 33 weeks of pregnancy because of preterm PROM,twins shared only one placenta and had sex discordant. Pathologically, the placenta was monochorionic, so we diagnosed them as MCDZ twin. In addition, neonates developed Twin Anemia-Polycythemia Sequence (TAPS) after birth; male had anemia and female polycythemia. There were blood chimerism among them; each of them had the other's lymphocytes.
Conclusion: It is considered that MCDZ twin is involved in assisted reproductive technology (ART) including ovulation induction. As the number of ART-related pregnancy have been increasing,it is predicted that the frequency of MCDZ twins might be also increase in the future. TAPS has not only perinatal risks but also the genetical problems originating in blood chimerism. Therefore, we emphasize that the careful follow up are required in this case.

44.
ANALYSIS OF PERINATAL EVENTS COMPLICATED WITH DECIDUAL POLYP

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Introduction: Decidual polyps are often found during pregnancy. Few were reported pregnancy with decidual polyp, and no definite opinion has

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 dibutyryl (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 scare. 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) genotying 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 technic 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