Data on the mode and the result of management were collected from medical records.
Results: All cases were vaginal delivery. We diagnosed eight cases were trapped placenta, 41 cases were adherent placenta, and one case was placenta accreta. Adherent placenta were underwent manual removal of placenta. Placenta accreta associated with bicornate uterus removed the one side uterus at the time of infection. These interventions were performed on the day from delivery on average: zero day for bleeding, nine days for infection, 1.6 days for hopeful cases, and 23 days for placenta accreta. 28 cases (56%) required blood transfusion. Two cases (4%) were performed UAE. UAE was performed prior to placental delivery. Of all 49 cases who underwent manual removal of placenta, eight cases were partially left, and two cases required hospitalization.
Conclusion: 96% of these cases were not required UAE.

37.
PECULIAR BLOOD FLOW PROFILES IN PLACENTAL CHORIONIC VILLOUS VESSELS IN A CASE OF SYSTEMIC LUPUS ERYTHEMATOSUS DESCRIBED USING MICRO-VASCULAR IMAGING

Asami Inoue [1], Takashi Horinouchi [1], Sakiko Sanada [2], Toshiyuki Yoshizato [1], Yutaka Kouzuma [1], Masato Yokomine [1], Kimio Ushijima [1]. [1] *Department of Obstetrics and Gynecology, School of Medicine, Kurume University;* [2] *Department of pathology, School of Medicine, Kurume University*

Introduction: SMI is a new technology for observing low blood flow /high-resolution Doppler images. We report a case of SLE, showing a peculiar blood flow profile of placental villous vessels (PVVs) using SMI.
Case: The patient was a 36-year old nulliparous woman with SLE. At 36/0 weeks' gestation, severe fetal growth restriction of -2.6SD for the gestation and a thick placenta of 67mm was noted. There was a thin area in the myometrium to which the placenta was attached. SMI revealed double layers of signals in the area of the normal myometrium equivalent to myometrium and decidual blood flows, however, only a single layer in the area of the thin myometrium. PVVs flow profiles were different depending on the sites; sparse PVVs with poor branching structures underneath the area of normal myometrium, and more sparse and fewer branching PVVs underneath the area of thin myometrium. At 36/3 weeks' gestation, Caesarean hysterectomy was performed due to abnormal fetal heart rate patterns and placenta previa. A 1,771-gram female neonate was delivered. Histopathological examination of the placenta showed missing decidual tissues in the area of the thin myometrium and the villous stroma at placenta increta had rich fibrin depositions.
Discussions: We speculated that the sparse distribution of PVVs and poor branching structures were due to chronic utero-placental insufficiency and a poor blood supply in the area of thin myometrium led to further maldevelopment of chorionic vessels.

38.
THE ASSOCIATION WITH MICRORNAS IN THE PATHOGENESIS OF PREECLAMPSIA

Misa Nunode, Masami Hayashi, Atsushi Daimon, Yumi Murayama, Yoko Nagayasu, Masami Sawada, Takumi Sano, Daisuke Fujita, Masahide Ohmichi. *Osaka Medical College, Obstetrics and Gynecology*

Objective: Placentation requires the invasion of trophoblasts into the decidua and myometrium.And if they are insufficient,it result in placental hypoplasia and causes preeclampsia.
Involvement of trophoblasts in the myometrium has been suggested to involve Heparin-binding epidermal growth factor (HBEGF). Although it is known that expression of HBEGF is significantly reduced in the preeclampsia placenta, no association with microRNA(miR) has been reported. To detect the influence of miR132, which has been reported to be involved in the invasion of cancer cells ,in a trophoblast cell line, on the invasion ability of trophoblasts through regulation of HBEGF expression.
Methods: After been cultured and transferred pre-miR132, the trophoblast cell lines(BeWo and HTR8/SVneo) were seeded. After 48hours, RT-PCR was used to measure the expression levels of HBEGF mRNA .
Results: The expression of miR132 was increased in BeWo and HTR8/SVneo after miR132 transfection.
Compared with the control group, the expression levels of HBEGF mRNA was significantly reduced in the cell group by miR132 transfection.
Conclusion: Involvement of miR132 and HBEGF expression in trophoblast cell line has been suggested.

39.
HOMOCYSTEINE INDUCES APOPTOSIS IN CHORIOCARCINOMA CELLS

Eri Watanabe [1], Kimihiro Nishino [1], Yukari Taguchi [1], Kaoru Niimi [1], Eiko Yamamoto [2], Fumitaka Kikkawa [1]. [1] *Department of Obstetrics and Gynecology, Nagoya University;* [2] *Healthcare administration, Nagoya University*

Introduction: In recent years, folate deficiency has been reported to be associated with habitual abortions, placental abruption or infarcts, and intrauterine growth retardation, and the mechanism is considered that folate deficiency slows the turnover of the folate pathway and increases blood serum concentration of Homocysteine (Hcy). Furthermore, there are some reports that Hcy induced apoptosis of trophoblasts. Thus, we focused on the possibility that intracellular Hcy concentration is involved in choriocarcinoma cell death by methotrexate (MTX).
Objective: The purpose of this study was to establish MTX resistant choriocarcinoma cell lines and to investigate the possibility that Hcy would decrease cell viability and increase apoptosis in choriocarcinoma cells.
Methods/Results: We established MTX resistant choriocarcinoma cells with using JAR cells. The IC50 was 8.88×10^{-7}M for the wild strain and 3.35×10^{-3}M for the MTX resistant strain. 200μM, 1mM, 2mM, 10mM, 20mM Hcy was added to the JAR cells, and the viable cells after 48 hours were counted. The percentages of viable cells to control which is viable cells with no treatment were 73%, 50%, 37%, 20% and 5%, respectively. Next, 1mM, 5mM Hcy was added to the JAR cells, and apoptosis was evaluated using flow cytometry. In control, 1mM Hcy, 5mM Hcy, the apoptotic cells rates in total cells were 5.9, 5.4, 10.3%, respectively.
Discussion/Conclusion: In MTX sensitive JAR cells, Hcy treatment was considered to induce apoptosis and suppress cell proliferation.

40.
A CASE OF CRIMINAL OFFENSE REVEALED BY RETAINED PLACENTA

Tsuyoshi Ishida [1], Yuichiro Nakai [1], Soichiro Suzuki [2], Yukiko Hazama [1], Hirotake Nishimura [3], Takuya Moriya [3], Takahumi Nakamura [1], Mitsuru Shiota [2], Koichiro Shimoya [1]. [1] *Department of Obstetrics and Gynecology1, Kawasaki medical school;* [2] *Department of Gynecologic Oncology, Kawasaki medical school;* [3] *Department of Pathology, Kawasaki medical school*

Introduction: Unwanted pregnancy can be an underlying cause in incidents of abandonment of newborn babies after birth, and occurs often in Japan. Many such cases involve home births, which can also pose dangers to the mother. In this paper, we report our experience of a case in which a patient was brought to our department due to severe anemia caused by retained placenta following home birth, and which ultimately became a criminal case.
Case: A 32-year-old woman, gravida 5, para 4, visited a nearby clinic with a chief complaint of dizziness. As anemia and decreased hepatic function were observed, she was transferred to the emergency outpatient department of our hospital. On arrival, genital bleeding was observed, a blood test showed that hemoglobin levels had dropped to 3.5 g/dL, and a computed tomography scan revealed a uterine mass, and the patient was transferred to our department. An examination revealed a chorionic villi-like component in the vagina and placenta-like tissue attached to the wall of the entire uterus. Although we attempted traction, it proved difficult and after administering a blood transfusion we attempted manual removal under general anesthesia. However, as removal was difficult, we performed a

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

Masataka Nomoto, Tomomi Kotani, Yoshinori Moriyama, Takafumi Ushida, Kenji Imai, Tomoko Kobayashi, Fumitaka Kikkawa. *Department of gynecology & obstetrics, Nagoya University*

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

Haruka Matsui [1], Takayuki Iriyama [1], Midori Yoshikawa [1], Seisuke Sayama [1], Kaoru Niimi [2], Eiko Yamamoto [3], Tomomi Kotani [2], Takeshi Nagamatsu [1], Kaori Koga [1], Yutaka Osuga [1], Tomoyuki Fujii [1]. [1] *Obstetrics and Gynecology, The University of Tokyo;* [2] *Departmentof Obstetrics and Gynecology, Nagoya University Graduate School of Medicine;* [3] *Departmentof Healthcare Administration, Nagoya University Graduate School of Medicine*

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

Takuma Suzuki [1,2], Kyosuke Kagami [1], Takashi Iizuka [1], Sakiko Masumoto [1], Kyohei Nakade [1], Rena Yamazaki [1], Masanori Ono [1], Hiroshi Fujiwara [1]. [1] *Department of Obstetrics & Gynecology, Kanazawa University;* [2] *Saiseikai Takaoka Hospital*

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

Tomohiro Yoshida, Takuya Misugi, Ryo Uemura, Megumi Hudaba, Aki Takase, Mie Tahara, Akihiro Hamuro, Akemi Nakano, Daisuke Tachibana, Masayasu Koyama. *Obstetrics and Gynecology, Osaka city university hospital*

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