

Partial molar pregnancy with live fetus in first trimester: what should we do next

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Abstrak. Insidens fetus hidup normal dengan mola parsial sangat jarang dan bervariasi 5 per 100000 dan 1 per 10000 kehamilan. Kehamilan mola parsial merupakan variasi dari kehamilan mola dengan embrio yang berkembang tidak lengkap atau memiliki anomali struktur yang banyak.

Seorang primigravida 27 tahun dengan gestasi usia 13 minggu masuk dengan perdarahan spot pervaginam, mual berlebihan dan muntah dengan gambaran USG plasenta hidropik multipel kista dengan Fetus yang hidup. Walaupun demikian pasien tetap melanjutkan kehamilan di bawah observasi ketat dan evaluasi sonografi canggih untuk menyingkirkan diferensial diagnosis lainnya. Ultrasonografi memberikan gambaran mosaik pada mola parsial (terutama diploid, sebagian kecil triploid). Kondisi ini dapat memberikan prognosis yang memungkinkan fetus lahir dengan selamat. Pertemuan komite etik dilakukan untuk mempertimbangkan kondisi fetus apakah dilakukan monitor berkala dan terminasi kehamilan pada kasus gawat janin.

Manajemen optimal mola hidatiform dengan fetus hidup masih belum jelas. Konsultasi antenatal harus mempertimbangkan keadaan risiko ibu dan janin. Follow up ketat dan evaluasi kondisi pasien harus dilakukan di masa periode antenatal dan pascanatal.

Kata kunci: trisemester pertama, fetus hidup, manajemen, kehamilan mola parsial

Abstract. The incidence of a normal live fetus with a partial mole is extremely rare, and it varies between 5 per 100000 and 1 per 10000 of the pregnancies. A partial molar pregnancy is a variation of a molar pregnancy in which an embryo either develops incompletely or with multiple structural anomalies.

A 27-year-old Primigravide at 13 weeks of gestation got admitted with spotting per vaginam, excessive nausea and vomiting, and her ultrasound revealed a hydropic placenta with multiple cysts with a live fetus. Regarding these findings, the patient continued her pregnancy under close observation, and advanced sonographic evaluations were done to rule out other differentials. Ultrasonography found mosaicism in the partial mole (mostly diploid, a small part is triploid). In this condition, the prognosis condition for the fetus to be born safely is still probable. Ethics committee meetings are held with the consideration of the fetus's condition, whether monitoring is carried out regularly, and terminating the pregnancy in case of fetal emergency.

The optimal management of hydatidiform mole with the coexistent live fetus is currently uncertain. Antenatal consultation should include a detailed discussion of maternal and fetal risks. It is also necessary to have close follow-up and evaluation of the patient's condition during the antenatal and postnatal period.

Keywords: first trimester, live fetus, management, partial molar pregnancy

Background

Gestational trophoblastic disease (PTG) is a disease associated with placental abnormalities in pregnancy.¹ According to the World Health Organization (WHO), PTG is divided into pre-malignant and malignant types. PTG includes complete hydatidiform mole and partial hydatidiform mole. Based on its histopathology, malignant PTG is divided into four types,

namely invasive mole, choriocarcinoma, placental site trophoblastic tumor (PSTT), and epitheloid trophoblastic tumor (ETT).² The incidence of a normal live fetus with a partial mole is extremely rare, and it varies between 5 per 100000 and 1 per 10000 of the pregnancies. A partial molar pregnancy is a variation of a molar pregnancy in which an embryo either develops incompletely or with multiple structural anomalies.³ It usually derives from

dispermic fertilization of a normal haploid oocyte and produces a triploid set of chromosomes (69 XXX, 69 XXY, or 69 XYY) most commonly associated with the presence of a malformed fetus.⁴ Survival of a fetus to term in the presence of partial mole remains an extremely uncommon occurrence, and such cases represent an extremely rare outcome of molar pregnancy.⁵ we report one of the rarest presentations of partial molar pregnancy with the live fetus in the first trimester and then what should we do next.

Case Report

A 27-year-old Primigravide at 13 weeks of gestation got admitted with spotting per vaginum. She referred from Aisyiah Ponorogo Hospital on July 20, 2020, with a diagnosed hydatidiform mole. The patient feels that the stomach is enlarging faster than it should be. The patient complained of spotting per vaginum for two weeks before admitting, not accompanied by molar bubbles. Nausea and vomiting were denied. Defecate and bladder within normal limits. Abdominal pain undeniable. No personal or familial history of genetic abnormalities was detected. On examination, the patient's vitals were stable. The

systemic examination was normal. On abdominal examination, fundal height corresponded to 20 weeks gestation, the uterus was relaxed, and the fetal heart rate was 157 times/minutes. Examining the external genitalia and per speculum examination did not show any other abnormality except for mild spotting. Ultrasonographic examination on July 20, 2020, showed an alive fetus CRL 6.48 corresponding 13 weeks gestational age with a hydropic placenta with multiple cysts like “honeycomb” appearance, which occupied a portion of the placenta. There were no signs of placental separation. The features were consistent with molar changes, and the fetus was found to be structurally normal. The fetal heart rate was normal 157 times/ minutes. Figure 1. Hemoglobin, platelet count, liver and renal function tests, 24 hours urinary protein, thyroid function tests were normal. The human chorionic gonadotrophin titer (HCG) was 609.207 mIU/ml. We were diagnosed with partial molar pregnant, plan to termination of pregnancy. After the examination of the current fetus condition, the obstetric and gynecologic department decides to consult with the Fetomaternal division and consult to Ethics Committee to consider termination or continue of pregnancy.



Figure 1. a. Fetal Heart Rate show 157 times/ minutes, b. hydropic placenta with multiple cysts like “honeycomb” appearance, c. The fetus was found to be structurally normal.



The patient was examined on July 21, 2020, from The Prenatal Diagnostic Unit Fetomaternal Division of Obstetric and Gynecologic University Sebelas Maret/ Dr. Moewardi Hospital that found sonography results showed a part of the placenta with a molar appearance (30%). However, some showed a healthy placenta (70%). Sonographic results show the impression of a normal fetal anatomical structure. It can be concluded that the problem that occurs tends to be mosaicism in the partial mole (mostly diploid, a small part is triploid). In this condition, the fetus's prognosis condition to be born safely is still open/probable. The condition of a partial placenta with a hydropic appearance presenting a mole still has the potential to provide unfavorable fetal outcomes that need to be anticipated. From the previous case reports, the fetus will tend to be born prematurely at 30-32 weeks for the indications: antepartum hemorrhage, rupture of the membranes (PROM), spontaneous preterm labor. The placenta cannot function optimally so that the fetus falls into a hypoxic state (IUGR, oligohydramnios, poor fetal well being, and C / P ratio <1)

If the hypervascular area in the hydropic area becomes dominant, there will be fluid overload to the fetus, which results in the fetus becoming hydropsfetalis. Other related results make it easier to maintain pregnancy: In partial mole, the risk of developing GTN is very low, and the risk of invasion to the myometrium is low. So the best decisions, for now, are: Maintain pregnancy, monitor, and anticipate preterm delivery at 30–32 weeks.

On July 22, 2020, the ethics committee meeting results considering the mother and fetus' condition in good condition; pregnancy is followed by monitoring. Monitoring the condition of the mother and the fetus was carried out carefully involving Obstetricians in Ponorogo. The patient's condition allows for an outpatient return to the area of origin. If there is an emergency condition of mother and fetus, pregnancy termination is performed. During that period, routine investigations were normal fetus condition, and the serum beta HCG August 18, 2020, was 750.000 mIU/ml, September 14, 2020, was 300.000, October 4, 2020, was 999.000mIU/ml were collected.

Discussion

Partial molar pregnancy with a coexisting fetus is a rare complication with an incidence of 0.005%–0.01% of all the pregnancies.⁶ It usually derives from dispermic fertilization of the normal haploid oocyte and produces a triploid set of chromosomes.⁴ Ultrasonography has made it possible to diagnose a hydatidiform mole and coexistent fetus in the first trimester.⁶ Hydatidiform mole with coexistent normal fetus is not necessarily considered a partial mole. Cases of such association can be classified into three types. The first and most common is a twin pregnancy with one normal fetus having a normal placenta and another complete mole. There have been so far, about 200 such cases fully documented in the literature, of which only 56 resulted in a term live birth. The second type is a twin pregnancy with a normal fetus with normal placenta and another partial mole. The third and most uncommon occurrence is a singleton normal fetus with the partial molar placenta similar to our case as had previously been reported by Tesemma.⁵

In the past, most molar pregnancies associated with live fetuses were terminated because of adverse maternal and fetal outcomes in advanced gestations in contrast with our case that will be maintained pregnancy, monitor, and anticipate preterm delivery at 30–32 weeks.⁵ This agrees with the study of Kanagalakshmi A 32-year-old primigravida 34 weeks gestation, she delivered an alive preterm male baby of weight 1.5 kg with 1 minute APGAR 5/10 and 5 minutes APGAR 7/10.³ The decision to continue with that pregnancy considering to the condition of the mother and fetus in good condition, pregnancy is followed by strict monitoring, and serum B HCG level is in line with the findings by De Francis et al.^{4,7} In every case of molar pregnancy suspect for a normal fetus, adequate counseling of the patient and a strict follow-up during and after pregnancy for the risk of persistence of the trophoblastic pathology are necessary.^{4,8} In contrast, the last level b-hCG in this patient was 999.000mIU/ml indicates very high b-hCG, if we follow the serum b-hCG level greater than 106 mIU/mL based on Rahamni study, the TOP (termination of pregnancy) should be considered.⁶

If the pregnancy does not stop, molar pregnancies with a normal fetus remain challenging.⁴ Maternal risks should be explained to mother include information of abnormal bleeding, hyperemesis gravidarum, preeclampsia, eclampsia, hyperthyroidism, anemia, preterm labor, mal-presentation like a transverse lie, preterm premature rupture of membrane (PROM), persistent trophoblastic disease, and abruption. Fetal complications include abortion, congenital anomalies, preterm, severe anemia due to limited placental circulation, IUGR, and intrauterine fetal death (IUFD).^{6,9}

Conclusion

In our case, the mother with partial molar pregnancy with a live fetus in first trimester continue close monitoring and evaluation, and planning for termination of pregnancy at 30 -32 weeks. Antenatal consultation should include a detailed discussion of maternal and fetal risks.

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