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Case Report

Unsuspected partial hydatidiform moles discovered at laparotomy: A case report

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ABSTRACT

Background: Gestational trophoblastic disease which develops from placenta and can metastases, involves hydatidiform mole also known as molar pregnancy. It's extremely rare to have a pregnancy involving hydatidiform mole and a live fetus.
Case Report: A 30-year-old Javanese woman, gravida 2, para 1, referred to Temanggung Hospital who experienced uterine contractions and vaginal bleeding at 32 weeks' gestation was considered to have placenta previa. A 2 cm cervical dilation was found during genital exam, along with a cluster of blackish red little grape-like vesicles from her vagina She has never had ultrasound examination. We decide to do emergency cesarean section with their consent. Following spinal anesthesia, the patient experienced an episode of generalized tonic-clonic seizure then she was lost consciousness and needed to be intubated. Later, for mechanical ventilation, she was sent to the ICU. a 950 g, 40 cm long male newborn was delivered with Apgar scores of 6, 6, and 7 respectively at the 1,5, and 10-minute. He was taken right away to the NICU. The placenta which was large and hydropic was recovered manually. Diagnosis was confirmed by histopathology.
Discussion: Ultrasound is the main method for diagnosing hydatidiform moles. There were just a few changes to the villous vesicles in PHM patients and the majority of pregnancies ended in abortion and fetal death. Despite the extremely low occurrence of the illness, this case is significant since PHM recognition and diagnosis are crucial for patient management. When delivering a live fetus with a hydatidiform mole, a caesarean section is advised because uterine contractions might drive hydatidiform tissue into the abdominal cavity, increasing the risk of pulmonary embolism.
Conclusion: Under careful management, a partial hydatidiform mole and pregnancy can lead to the delivery of a healthy fetus and a live birth.

1. Introduction

The incidence of a hydatidiform mole with a co-existing fetus has been observed to range from 0.005 to 0.001% of all pregnancies.[1] Complete and partial kinds of hydatidiform moles are distinguished by their unique disease processes and recognizable cytogenetic, histological, and clinical features. A typical haploid oocyte undergoes dispermic fertilization to produce a triploid pair of chromosomes, which gives rise to partial hydatidiform moles (PHM). The paternal diploid chromosome count in the complete hydatidiform mole (CHM) is 46.[2] While no fetus develops in CHM pregnancy, the fetus can develop in PHM pregnancy but is deformed and non-viable. In the majority of twin pregnancies with hydatidiform mole, the fetus and placenta are healthy. Because triploid fetuses frequently pass away in the first trimester, reports of PHM pregnancy with a live fetus are extremely uncommon.[3] There are many

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reports of a complete hydatidiform mole with a coexistent fetus associated with persistent gestational trophoblastic disease. Only a few cases of a partial hydatidiform mole and co-existing fetus have been reported. [1,3]

2. Case Report

On 21st March 2023, a 30-year-old Javanese woman, gravida 2, para 1, referred to Temanggung District Hospital experienced uterine contractions and vaginal bleeding at 32 weeks' gestation was considered to have placenta previa 12 hours before admitted. On clinical examination, her blood pressure was 100/80 mmHg and her pulse was 120 bpm. During abdominal palpations, her uterus felt hard with the fetus unable to be examined. Contractions felt every three minutes about 20 seconds every contraction. The baseline fetal heart rate was 150 bpm. Punctum maximum was found on upper left of her umbilical. Genital examination revealed cervical dilatation of about 2 cm with blackish red and cluster of vesicles similar to small grapes release from her vagina. She had history of intermittent bleeding in the past 16 weeks of pregnancy. Antenatal care was routinely every 4 weeks in midwife. She has never had ultrasound examination. We decide to do emergency cesarean section with their consent and did a series of pre-operative evaluation. Laboratory data pre-operative were as follows: hemoglobin 10.1 g/dL, leucocyte 19.9×10^3 uL, erythrocyte 3.78×10^3 uL, thrombocyte 537×10^3 uL, eosinophil 5.2%, neutrophil 75.4%, lymphocyte 13.5%, urea 9.2 mg/dL, and creatinine 0.68 mg/dL.

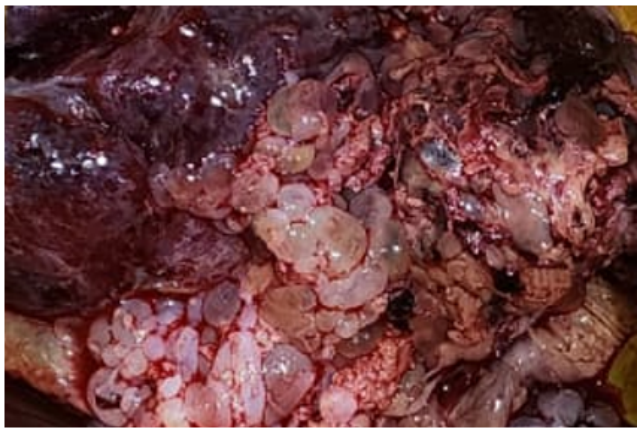

Fig. 1: The placenta was large and hydropic, and it had clusters of vesicles that looked like little grapes and were made of chorionic villi.

A low transverse incision cesarean delivery was carried out while receiving combination spinal-epidural anesthesia. and a 950 g, 40 cm long live male newborn was delivered with Apgar scores of 6, 6, and 7 respectively at the 1,5, and 10-minute. Following spinal anesthesia, the patient experienced an episode of generalized tonic-clonic seizure then she was lost consciousness and needed to be intubated. The placenta which was large and hydropic, with necrotic debris, was manually removed. About 750 mL of blood was thought to have been lost. Laboratory data post-operative were as follows: hemoglobin 7.4 g/dL, leucocyte 30.9×10^3 uL, erythrocyte 2.74×10^3 uL, thrombocyte 327×10^3 uL, pH 7.29, natrium 140.1 mmol/L, potassium 3.677 mmol/L, chloride 106 mmol/L, and calcium 1.2 mmol/L. Later, for mechanical ventilation, she was sent to the ICU.

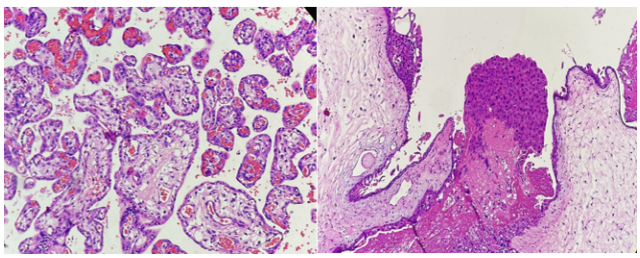

Fig. 2: Cytotrophoblast and syncytiotrophoblastcell-lined fragments of chorionic villi. The cytoplasm of cytotrophoblast cellsis abundant and their chromatin is smooth with only one round, oval nucleus.The cytoplasm of syncytiotrophoblast cells is abundant, they have round or ovalnuclei, and their chromatin is smooth. A portion of the chorionic villi has anedematous stroma and is hydropic. There is a lot of decidual tissue, and thecells have oval nuclei and eosinophilic cytoplasm. No evidence for malignancywas discovered.

3. Discussion

Since Hippocrates' time, hydatidiform moles have been recognized, and they are distinguished by a wide range of clinical manifestations and occasionally astonishing consequences. [4] It is notable that the risk for trophoblastic sequelae is higher in pregnancies with CHM (15%-20%) than in pregnancies with PHM (5%), which lacks fetal structure and has a diploid set of 46 chromosomes. When two sperm fertilize an ovum that first seems to be normal, a triploid karyotype is produced, which causes PHM pregnancies (69, XXY). [5] Three different varieties of molar pregnancy coexist with a healthy living fetus at this time. Twin pregnancies, when one normal fetus has a normal placenta and the other is a CHM, are the most typical form. The second form of pregnancy involves twins, one of which is a PHM and has a normal placenta. The third and least common type is singleton normal fetus with PHM pregnancy. [6]

Ultrasound is the main method for diagnosing hydatidiform moles. PHM typically manifests on ultrasound a honeycomb appearance; the line separating normal placental tissue from the honeycomb echo is not always evident, and the majority of fetuses are either dead or deformed. There aren't many structurally normal prenatal ultrasounds of PHM. Despite the fact that no

ultrasonography was performed in our situation. By using postoperative placental pathology, PHM was identified.[5–7]

A hydatidiform mole-complicated pregnancy is typically over as soon as it is diagnosed. In the example at hand, neither the patient nor the physician was aware that the patient had a hydatidiform mole. Despite the fact that the patient had been bleeding for the previous 16 weeks of gestation, she decided against performing any ultrasound imaging or other workup tests due to financial constraints.[6] Currently, it is well known that the majority of CHM fetuses develop normally, allowing women to decide to continue their pregnancies with the right assistance.[7] Preeclampsia, hyperthyroidism, vaginal hemorrhage, and theca lutein ovarian cysts are just a few of the possible maternal and fetal issues that should be clearly explained to the woman. The likelihood of postpartum trophoblastic illness developing into a chronic condition is considerable.[8] Fewer villous vesicles were altered in PHM instances, cellular growth was encouraged, 90% of fetal chromosome karyotypes were triploid, and the majority of pregnancies ended in abortion and fetal mortality. Chemotherapy is rarely necessary and metastasis ordinarily does not happen because the likelihood of postpartum progression into permanent trophoblastic disease was shown to be just 4%, a figure far lower than the probability for CHM.[9]

In the present case, a small amount of vaginal bleeding occurred during the second trimester of pregnancy. However, this instance demonstrated that, with the right management, PHM can lead to a healthy fetus and live birth. Therefore, despite the extremely low occurrence of this illness, this case is significant because PHM recognition and diagnosis are crucial for patient management. The condition of both the mother and the fetus during this pregnancy was rigorously checked and followed up in accordance with the hydatidiform mole follow-up principle.

In the early stages of pregnancy, this is typically followed by total curettage of the uterus. Hydatidiform mole pregnancy termination varies depending on the gestational time and severity of the illness. The effectiveness of caesarean sections or intra-amniotic oxytocin and rivanol injections during the second trimester of pregnancy is up for dispute.[2,3,6] A caesarean section is recommended in order to deliver a live fetus with a hydatidiform mole because uterine contractions can push hydatidiform tissue into the abdominal cavity, increasing the risk of pulmonary embolism. During the surgery, oxytocin was used after the fast excision of the grape tissue. Good uterine contractions and minimal bleeding were present.[5]

4. Conclusion

We have discussed a rare instance of a partly hydatidiform molar pregnancy coexisting with a live fetus in our report. This example demonstrates that, with the right management, PHM in combination with a viable fetus can lead to the live delivery of a healthy baby.

5. Source of Funding

None.

6. Conflict of Interest

None.

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