

Twin Pregnancy Coexisting with Partial Mole and Normal Fetus: A Case Report

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Abstract

This case report highlights the rare occurrence of a twin pregnancy coexisting with a partial mole, presenting a unique set of challenges in management and outcome. A 20-year-old woman with primary subfertility conceived twins following ovulation induction, experiencing hyperemesis gravidarum and subsequently developing severe pre-eclampsia. Despite efforts to control her condition, termination of the pregnancy was necessary due to maternal safety concerns. Both twins, without anomalies, succumbed to early neonatal death. Histopathological examination revealed a partial mole. The case emphasizes the importance of vigilant monitoring and individualized treatment in such complex pregnancies, with a focus on maternal well-being. Continued follow-up is crucial to detect and manage potential gestational trophoblastic disease. This report underscores the need for informed decision-making and patient-centered care in managing twin pregnancies coexisting with molar tissue.

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Background

Co-existence of partial mole and twin pregnancy occurs rarely. If it occurs it is usually associated with complications like fetal anomalies, hyperemesis gravidarum, severe pre-eclampsia and termination of pregnancy. Partial mole and its association with twin pregnancy with normal fetuses is also a quite rare form of gestational trophoblastic but unfortunately associated increased risk of obstetric complications and poor perinatal outcome.

Case Presentation

A 20 year lady, married for 4 years with primary subfertility had her ovulation induction at our center. She conceived after induction with twin pregnancy.

In first trimester she developed hyperemesis gravidarum and was admitted twice. In early second trimester she became hypertensive and at twenty weeks of pregnancy showed features of severe pre-eclampsia. Her ALT was 72, with 24 hours urinary proteins 1190 mg/24 hours. The ultrasound at this stage showed normally growing

twin fetuses.

At around 24 weeks her blood pressure was 170/100, abdominal examination showed her symphysio-fundal height at 30cm. She had bilateral pitting pedal edema along with oedema of anterior abdominal wall. Ultrasound showed both twins, alive along with enlarged ovaries.

After admission anti-hypertensive medication was started but despite higher doses, her pressure remained uncontrolled. Subsequently her labs were further deranged and patient become symptomatic with headache, blurring of vision and epigastric pain.

For safety of mother the termination of pregnancy was planned at 26 weeks of gestation as recommended by guidelines. Medical termination done with misoprostol according to FIGO protocol and she delivered both twins with cephalic presentation. Placenta and membranes were delivered manually. Placenta was very unhealthy looking and has some cystic lesions on it, so it was planned to send placenta for histopathology. Both twins were male with of 800gm and 850 gm. and were without

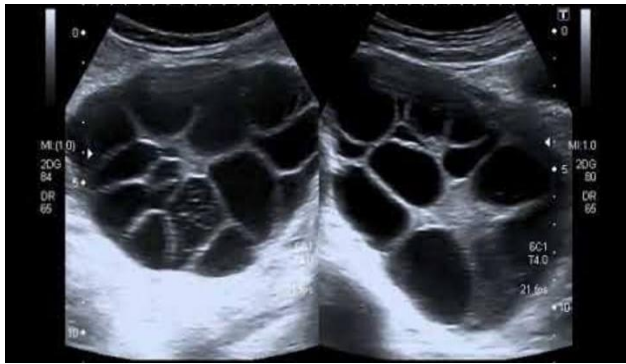
visible structural anomalies. They were kept in NICU but ended up in early neonatal death within 24 hours. Autopsy was not done but no visible structural abnormality noted in both twins.

The histopathology report of placenta showed partial mole with dilated chorionic villi along with focal trophoblastic proliferation with no features of malignancy.

At the time of discharge her beta HCG was done which was 4500 IU and USG showed bilateral theca luteal cysts. She was put on follow up for BHCG and USG.

It took 8 months for BHCG to become less than 5 IU and 6 months for disappearance of theca luteal cysts.

But during these 8 months she had unscheduled bleeding for 5 months



Discussion

Partial molar pregnancy results from fertilization of normal ovum by two sperms giving rise to triploid karyotype that is 69 XX. Three types of molar pregnancy occur with normal fetus that is twin pregnancy with one normal baby and normal placenta and another complete mole, the second type is twin pregnancy with normal fetus and placenta and other with partial mole and the third one which is uncommon is normal fetus with partial molar pregnancy.

Ultrasound is the main tool used for diagnosis of molar pregnancy in antenatal time period, but in our case ultrasound does not reveal any abnormality during antenatal time period. Patients' early presentation was severe preeclampsia that was the alarming sign later on bilateral theca luteal cysts were identified. Molar was confirmed in our case after histopathology of placenta that it is a partial mole.

Partial mole coexisting with alive fetus occurs rarely. Normal looking placenta with normal fetus can be associated with either partial mole or complete mole. The

risk factors for such type of pregnancies are previous molar pregnancy or occurs at extreme of ages 1,2.

All types of molar pregnancies are usually associated with fetal anomalies and maternal complications.^{3,4} The incidence is around 0.005% - 0.01% of all pregnancies.⁵

A same case was reported in department of obstetrics and gynae Madda Galabu university Ethiopia. She was 40 years old G13P10a2 at 28 weeks. She was a case of twin pregnancy and pre-eclampsia with headache, bilateral pedal edema and epigastric pain with reduced fetal movement on examination fundal height was larger than dates and BP was raised. Her USG showed honey combing in placenta. Her BP was controlled and delivered a male child of 1400 gm with ENND and histopathology confirmed partial mole.⁶

In our case we had partial mole with normal twins same such a case report of 32 years old G3P2 presented at 22 weeks with uterine contractions in hospital of southern medical university she delivered a live normal baby with molar pregnancy.⁷

Twin or triplet pregnancies have greater risk of pre-eclampsia, preterm labor and poor neonatal outcome. In our case patient had hyperemesis gravidarum with early onset of PIH and later on developed severe PE which was confused with twin pregnancy, but it's actually amplified due to presence of molar tissue which was diagnosed after termination of pregnancy.

Initial modality which is considered as best screening and diagnostic tool is beta HCG. It has higher detection rate if done in early second trimester (.43%-68%)⁶. Histopathological findings truly differentiate between partial and complete mole.¹

Treatment plans vary from patient to patient and is based on time of diagnosis. When diagnosed earlier options are discussed with couple. Most of these pregnancies arise from infertility treatment (as in our case). So most of women wanted to continue the pregnancy despite the risks. But when diagnosed in later part of pregnancy it's hard to decide to continue the pregnancy or terminate it. Continuation of pregnancy with strict fetomaternal monitoring⁸. Best mode of delivery is via C section to minimize risk of metastasis^{9,10}.

Due to risk of progression of disease strict follow up plan should be made because there is a possibility that it persists as GTD. Patients with complete mole should be followed for 6-12 months after normalization of beta

HCG and patient with partial hydatidiform mole should be followed for 4 weeks after normalization of beta HCG.

Conclusion

Grave maternal complications are associated with twin pregnancy and molar pregnancy, so maternal safety should be prioritized. If patient wants to continue the pregnancy she should be booked in tertiary care setting. Termination should be planned if it's associated with fetal anomalies or worsening of maternal condition.

Consent

Informed consent is obtained from the patient before publication.

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Authors Contribution:

^{1,4}Substantial contributions to the conception or design of the work;

^{2,3,4,5}the acquisition, analysis, or interpretation of data for the work & Final approval of the version to be published

^{1,2} Drafting the work or revising it critically for important intellectual content.