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Case of Twin Pregnancy with Complete Hyadatiform Mole and A Normal Fetus

Veena Gupta	Professor, Department of obstetrics and gynaecology, M.L.N. Medical College, Allahabad, U.P., India
*** Shweta Patel**	Senior Resident, Department of obstetrics and gynaecology, M.L.N. Medical College, Allahabad, U.P., India * Corresponding Author
Amita Yadav	lecterur, Department of obstetrics and gynaecology, M.L.N. Medical College, Allahabad, U.P., India

ABSTRACT

Hydatidiform mole with a coexisting fetus is an extremely rare phenomenon; the incidence of such an occurrence ranges 1 in 22,000 to 100,000 pregnancies. We are presenting the case of a 33 year old female G6P5+0 who presented with bleeding per vaginum, breathlessness, hypotension following 7.5 months amenorrhoea. She had no any antenatal check up. Lower segment caesarean section was done because of antepartum haemorrhage. A stillborn, female baby of 1 kg was delivered. A complete normal placenta and adjacent part of placenta was showing fluid filled vesicles. Microscopic examination of the abnormal placentas confirmed complete hydatiform mole. Chemotherapy was given. Serial maternal serum hCG levels showed a declining trend and were undetectable by a few months after delivery. Case shows that patient of twin pregnancy with hydatiform mole with early diagnosis and strict follow up can give birth to a normal fetus. Complications associated with these cases should also be monitored in postnatal period. Our case needs to be reported because of rare condition and its complications.

KEYWORDS Persistent trophoblastic disease, Complete hyadatiform mole, Human Chorionic Gonadotropin

Introduction:

Hydatidiform mole with a coexisting fetus is an extremely rare phenomenon; the incidence of such an occurrence ranges 1 in 22,000 to 100,000 pregnancies[1,2]. Traditionally, there were two possible conditions: a partial mole with an abnormal triploid fetus, and a complete mole combined with a normal fetus and placenta Diagnosis in such cases is very important due to severe complications in most of the cases, such as spontaneous abortion, antepartum haemorrhage, preeclampsia, preterm delivery, intrauterine fetal death or termination immediately after the diagnosis. When diagnosis is made in the early gestation the decision whether to conserve or not is always problematic. Postpartum management is also very important as these cases are at high risk of persistent trophoblastic disease (PTD). However assessment of 77 twin pregnancies, comprising a complete hydatidiform mole and a healthy co twin showed 40% result in livebirth without significantly increasing the risk of persistent gestational trophoblastic disease[3]. We report a case of a twin pregnancy with a complete hydatidiform mole coexisting with a normal fetus presented as antepartum haemorrhage, admitted to the Department of Obstetrics and Gynaecology, M.L.N. Medical college, Allahabad in emergency

Case report:

The patient was a 33 year old, gravida 6, para 5 who presented at 30 weeks gestation in gynae casualty with the complain of bleeding per vaginum for 3 days and breathlessness for 2 days. She experienced recurrent attacks of vaginal bleeding, mild and red coloured. She was unbooked case with no antenatal check up in this pregnancy. On examination; Her general condition was poor, pulse rate was 114beats/minute, blood pressure was 90/60 mm Hg and her temperature was 37.2°C.Moderate pallor was present. On abdominal examination the fundal height was 30 weeks and the uterus was doughy in consistency in most of its part. Per speculum examination revealed fresh bleeding which was moderate in amount. Ultrasound could not be done as the facility was not present at that time patient was admitted to our hospital and full laboratory investigations were sent and cross match was given. Her hemoglobin level was 6.6 g/dL and other investigations were within normal limits. Her β-HCG was > 3 lac IU/mL. High risk consent was taken and lower segment caesarean section with bilateral tubal ligation was done because of antepartum haemorrhage. A stillborn, female baby of 1 kg was delivered out with no apparent congenital anomalies; placenta was roughly disc shaped about 15 cm x 15 cm in diameter and was complete with a centrally attached, three vessel umbilical cord. Another sac was completely filled with multiple small grape like vesicles suggestive of complete hyadatiform mole, few vesicles were found attached to the normal placenta.(Fig-1).

Patient received 4 units blood postoperatively. During the postpartum period, the patient had an uneventful recovery. As initial β-HCG level was very high, the patient was given multiple dose of chemotherapy (methotrexate (1 mg/kg) combined with folinic acid. The β-HCG titre was significantly reduced on 3rd day after first dose of chemotherapy. Serum β -HCG titre had the normal regression curve during the first month after the delivery. Chest X-ray did not reveal any abnormality and Careful follow up showed no evidence of persistent or metastatic disease.

Histological examination of the grape-like, pearly white mass showed layers of degenerated, attenuated or hyperplastic sheets of trophoblasts with mild to moderate atypia, the cores of the villi showed 'cistern' formation and vessels were absent, favouring the diagnosis of complete hydatidiform mole. Unfortunately, karyotyping was not available.

Discussion:

Twin pregnancy with complete hydatidiform mole represents a very rare obstetric condition. There have been so far, about 200 cases of twin pregnancy with CHMF fully documented in literature, while only 56 cases resulted in a live birth[4]. This broad term can be classified into three major types: (1) twin gestation in which one twin is a diploid fetus with a normal placenta (46 chromosomes, 23 maternal and 23 paternal) and the other twin is a complete hydatidiform mole (46 chromosomes of paternal origin) with no fetus (this is applied to our case report). (2) Singleton gestation consisting of a triploid fetus with partial hydatidiform mole placenta (69 chromosomes, 23 maternal and 46 paternal). (3) Twin gestation in which one twin is a diploid fetus with normal placenta (46 chromosomes, 23 maternal and 23 paternal) and the other twin is a triploid fetus with partial hydatidiform mole placenta (69 chromosomes, 23 maternal and 46 paternal)[5]. Reported cases of twin pregnancy with complete hydatidiform mole (including our case) are not associated with any fetal anomalies; in some cases the mother has even given birth to fetuses that survived[6]. Management of such cases is always problematic because the possibility of fetal survival should always be weighed against the risk of complications of molar pregnancy. Some authors support the option of conservation under strict hospital based observation beacuse this risk of PTD is not affected with advancing gestational age[7]. Most of the expected complications can be diagnosed by strict follow up and clinical observation. According to these findings, we suggest that conservative management should always be a choice in such patients. With regard to our patient, she was unbooked and had no any antenatal check up until 28 weeks with no complication, showing that this pregnancy could be continued under strict follow up if was diagnosed earlier. Unfortunately she developed complications like severe vaginal bleeding respiratory distress, severe anemia and intrauterine fetal death for which she was taken for emergency LSCS. In Post operative period she did not experience any complications including gestational trophoblastic disease. To continue a twin pregnancy with CHMF parents should agree to take the risk of possible maternal complications associated with molar pregnancy such as early onset preeclampsia, hyperemesis gravidarum, hyperthyroidism, vaginal bleeding, anemia, development of theca lutein ovarian cysts, respiratory distress because of trophoblastic embolization to the lungs, and PTD. Parents must also be aware that these complications may lead to fetal intrauterine growth retardation, fetal distress and premature delivery and intrauterine fetal death.

Diagnosis of complete hydatiform mole with normal fetus is done with abnormally elevated β-hCG levels and normal fetal karyotype. Our investigation should also include molar placental karyotype which was not possible in our institution. The diagnosis was confirmed by ultrasound showing demarcation between the normal and molar placenta, normal fetus with normal placenta and complete hyadatiform mole, which was confirmed histologically.

Conclusions

The antenatal diagnosis of twin pregnancy with CHMF if diagnosed earlier by ultrasound, can be continued under strict follow up in a tertiary care centre so that any complications related to molar pregnancy can be diagnosed in time and should be treated without any delay. Meticulous Follow up is also important after delivery to exclude PTD.

Fig-1: normal baby with normal placenta and attached second sac showing multiple vesicles

References:

1. Moini A, Riazi K. Molar pregnancy with a coexisting fetus progressing to a viable infant. ***Int J Gynaecol Obstet.*** 2003;82(1):6364.
2. Sebire NJ, Foskett M, Paradinas FJ, Fisher RA, Francis RJ, Short D, et al. Outcome of twin pregnancies with complete hydatidiform mole and healthy cotwin. ***Lancet.*** 2002;359(9324):21656.
3. Fishman DA, Padilla LA, Keh P, Cohen L, Frederiksen M, Lurain JR. Management of twin pregnancies consisting of a complete hydatidiform mole and normal fetus. ***Obstet Gynecol.*** 1998;91(4):54650.
4. Dolapcioglu K, Gungoren A, Hakverdi S, Hakverdi AU, Egilmez E. Twin pregnancy with a complete hydatidiform mole and coexistent live fetus: two case reports and review of the literature. Arch Gynecol Obstet. 2009;279:431–436.
5. Piura B, Rabinovich A, Hershkovitz R, Maor E, Mazor M. Twin pregnancy with a complete hydatidiform mole and surviving coexistent fetus. Arch Gynecol Obstet. 2008;278:377–382. doi: 10.1007/s004040080591x.
6. Steller MA, Genest DR, Bernstein MR, Lage JM, Goldstein DP, Berkowitz RS. Clinical features of multiple conception with partial or complete molar pregnancy and coexisting fetuses. J Reprod Med. 1994;39:147–154. [PubMed]
7. Jacobs PA, Szulman AH, Funkhouser J, Matsuura JS, Wilson CC. Human triploidy: relationship between parental origin of the additional haploid complement and development of partial hydatidiform mole. Ann Hum Genet. 1982;46:223–231. doi: 10.1111/j.14691809.1982. tb00714.x. [PubMed] [Cross Ref]