

Partial molar pregnancy with live fetus at term: about a case and review of the literature

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Abstract: *Partial hydatidiform mole (PHM) is one of the gestational trophoblastic diseases. Also known as embryonal mole, it is a pathological human egg with villi undergoing vesicular transformation, but retaining a recognizable placental shape and an amniotic cavity with a fetus. The most common diagnostic circumstance is spontaneous abortion in the first trimester. Rarely, partial moles persist beyond the first trimester, leading to maternal and fetal complications and diagnostic confusion. The genetic origin of MHP corresponds to a triploid conception with an additional chromosomal batch of paternal origin. The coexistence of a fetus of normal karyotype with an MHP is an exceptional situation. We report a rare case of partial molar pregnancy with a live fetus at 37 weeks' amenorrhea (SA) in a 38-year-old woman.*

Keywords : Partial mole, live fetus

Introduction

Partial hydatidiform mole (PHM) is one of the gestational trophoblastic diseases. It is more frequent than complete hydatidiform mole, with an incidence of 3 per 1000 pregnancies [1]. The only clearly identified risk factor is maternal age [2, 3]. It is characterized by focal hydropic degeneration of the placenta, with a recognizable gestational sac and a fetus with excessive secretion of the hormone choriogonadotropin (HCG). The genetic origin of MHP corresponds to a triploid conception with an additional chromosomal batch of paternal origin [4]. The association of a live fetus with a normal karyotype is a very rare situation occurring in 0.005 to 0.01% of all pregnancies, and diagnosis in this case is often difficult, especially in the absence of revealing clinical signs [4, 5]. We report a rare case of partial molar pregnancy diagnosed and followed up at 37 weeks' amenorrhea with the delivery of a fetus of normal karyotype.

Case report

Our 38-year-old patient, with 2 live children by cesarean section and an unattended pregnancy, presented to the emergency department in early labor. The history-taking revealed no particular antecedents, the pregnancy had not been monitored, and no prenatal consultation or ultrasound scan had been performed. Clinical examination revealed a blood pressure of 130/80 mmHg. Uterine height was 32cm, with close uterine contractions (UC). An emergency ultrasound revealed a progressive pregnancy in transverse presentation with a biometry of 37 SA and an enlarged placenta with a vesicular appearance (Figure 1). A vaginal examination revealed a 4 cm dilated cervix. An emergency caesarean section was indicated for a double-scarred uterus at term. Intraoperatively, the uterus was enlarged with a normal gravid appearance. A segmental incision was made with transplacental extraction of a live female fetus with a birth weight of 2900 g and normal morphology. The placenta was vesicular in appearance (Figure 2). The newborn's karyotype was normal (46XX). Pathological examination of the placenta confirmed the diagnosis of MHP. Chromosomal study of the placenta showed a triploid 69 XXX karyotype. Postoperatively, the parturient presented no complications and the β HCG level fell rapidly.



Figure 1: ultrasound image of vesicular placenta



Figure 2: image of vesicular placenta after delivery

Discussion

Molar pregnancies are classified as non-viable conceptions [6]. This is an abnormality of conception, manifested by overgrowth of the placenta and lack of normal fetal development. These abnormalities usually result from the dispersed fertilization of a normal haploid oocyte, producing a triploid set of chromosomes [7]. In the presence of triploidy, the fetus cannot survive after birth due to multiple malformations and severe intrauterine growth retardation secondary to affected placental circulation.

The coexistence of a diploid fetus with MHP is an extremely rare situation in which the fetus can survive to term [5, 8]. Given this association, the main differential diagnosis is a twin pregnancy with a diploid fetus and a normal placenta, and a second placenta with complete mole, where the first evaluation is to look for a normal separate placenta [9]. Placental mesenchymal dysplasia, a placental vascular lesion, is also a rare differential diagnosis with MHP that should not be overlooked [10].

Early diagnosis of MHP leads in the majority of cases to termination of the pregnancy, partly because of the frequency of triploidy, and partly because of the maternal risk and the possibility of progression to persistent trophoblastic disease at a later stage [11, 12]. Close monitoring of mother and fetus can help achieve a favourable outcome, and evacuation of the pregnancy is only required in cases of fetal anomalies or deterioration in maternal condition [13]. Several factors can affect fetal outcome in partial molar pregnancy. These include the fetal karyotype, the size of the abnormal placenta, the rate of molar degeneration and the occurrence of fetal anemia or other obstetric complications such as prematurity [14].

Conclusion

Despite perfect knowledge of the pathophysiological mechanisms of chromosomal anomalies in molar pregnancies, the partial form with diploid fetus remains a confusing pathology, as there are often no clinical arguments in favor of the diagnosis. We need to be extremely vigilant in order to suspect these anomalies at an early stage, so as to make a reliable diagnosis and ensure optimal management.

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