Complete hydatidiform mole presenting as placenta previa in a twin pregnancy with a coexisting normal foetus: Case report

Barış Büke[1], Hasan Onur Topçu[2], Ece Bulgu[2], Elmin Eminov[2], Mert Kazandı[2]

[1]Department of Obstetric and Gynecology, Ege University Faculty of Medicine, İzmir, Turkey

[2]Department of Obstetric and Gynecology, Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara, Turkey

Abstract

We present a case of a patient with a complete hydatidiform mole co-existing with a normal foetus (CMCF) who had a caesarean section in week 32 of gestation, resulting in a live female infant weighing 1590 grams. The mother, with a normal bleeding pattern, did not require any surgical intervention. She was discharged from hospital on the third post-operative day. Premature termination is recommended in this type of pregnancy because of the risks associated with molar pregnancies. However, with the close follow-up of these pregnancies, good maternal and perinatal results may be obtained. (J Turk Ger Gynecol Assoc 2014; 15: 256-8)

Key words: Twin pregnancy, complete hydatidiform, placenta previa

Received: 16 August, 2013 **Accepted:** 15 October, 2013 **Available Online Date:** 08 August, 2014

Introduction

A complete hydatidiform co-existing with a live foetus (CMCF) is extremely rare. It is difficult to estimate the incidence of such pregnancies because the diagnosis can only be made by histological examination (1). Pre-eclampsia, hyperemesis gravidarum, vaginal haemorrhage, intrauterine foetal demise and increased risk of persistent trophoblastic disease are the most common complications (1-4). Careful clinical assessment, detailed ultrasound examination and chromosome analysis are essential for prenatal diagnosis. Patients with CMCF may have an increased risk of persistent trophoblastic disease. These pregnancies may have an aggressive biological course even after they have been terminated. The rate of trophoblastic tumours after such pregnancies has been reported to be 50 to 60% (1). However, there is no consensus on the diagnosis and management of such pregnancies. We present here a case of a CMCF who was delivered at 32 weeks of gestation.

Case Presentation

A 21-year-old nulliparous woman suffering from vaginal haemorrhage in the early second trimester of her pregnancy was referred to the Obstetrics and Gynecology Department of Ege University Hospital. Gestational age was 17 weeks and 4 days according to her last menstruation date at the time of admission. A live foetus and a placenta with multi-cystic heterogeneous appearance and increased anteroposterior diameter were observed on ultrasound examination (Voluson e8 Ultrasound Device, Buckinghamshire, United Kingdom) (Figure 1). Serum levels of β-hCG and haemoglobin were 77.509 mIU/mL and 11 g/dL, respectively. The thyroid function tests, amniotic fluid volume, umbilical artery Doppler flow velocimetry, foetal growth and the maternal blood pressure were all within normal limits. A normal karyotype (46, XX) was found based on the results of amniocentesis. The pregnant woman and her family were informed about molar pregnancy and written informed consent was obtained from the patient for this study. The termination of the pregnancy was recommended as an option because of the probable risks of molar pregnancy; however, the family refused this intervention. The mother was discharged after being advised to have bed-rest with subsiding symptoms, and was scheduled to have follow-up visits.

No apparent foetal abnormality was detected in the twenty first week of gestation during the second trimester obstetric ultrasound examination. The β-hCG level was 67.265 mIU/mL at the twenty first week of gestation. Magnetic resonance imaging (MRI) examination was performed because of the presence of low-lying placenta during her next follow-up visit. Many cystic structures with diameters of up to 2 cm were observed on the placenta. Both placenta previa totalis and placenta acreata were detected on MRI examination (Figure 2).

In the follow-up period, the patient was admitted to our hospital with the complaint of vaginal haemorrhage in week 32

Address for Correspondence: *Hasan Onur Topçu, Department of Obstetric and Gynecology, Zekai Tahir Burak Women's Health Education and Research Hospital, Ankara, Turkey. Phone: +90 532 635 95 38 e.mail: dronurtopcu@gmail.com*

©Copyright 2014 by the Turkish-German Gynecological Education and Research Foundation - Available online at www.jtgga.org

DOI:10.5152/jtgga.2014.25991

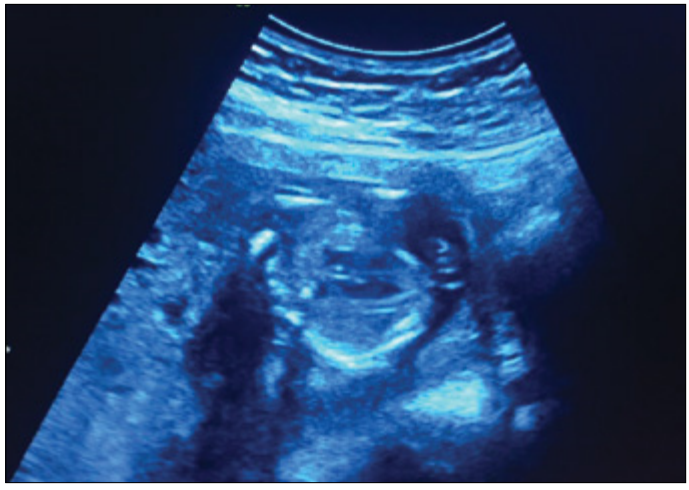

Figure 1. The ultrasound appearance of the foetus and the placenta

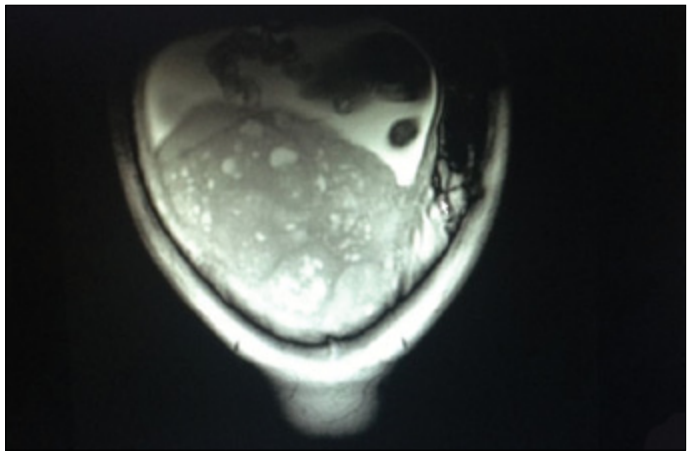

Figure 2. Magnetic resonance imaging of the foetus and the placenta

of gestation. The patient was hospitalised with the diagnosis of placenta previa totalis and preterm labour. Antenatal betamethasone for foetal lung maturation and intravenous $MgSO_4$ as a tocolytic agent were administered to the patient. The patient was taken urgently to the operation room for labour due to excessive vaginal haemorrhage at the gestational age of 32 weeks on the fourth day of hospitalisation. A female infant weighing 1590 g was successfully delivered by caesarean section. APGAR scores at the 1st and 5th minutes were 7 and 9, respectively. The surgery took place smoothly and none of the expected complications, such as significant uterine bleeding, were encountered during the operation. The serum β-hCG and haemoglobin levels were 30.134 mIU/mL and 9.7 g/dL, respectively, on post-operative day 1. Placentomegaly, hydropic degeneration and many vacuoles were observed to be compatible with complete hydatidiform mole in the placenta (Figure 3). The pathological examination confirmed the initial diagnosis of CMCF. The infant was admitted to the newborn intensive care unit because of prematurity. The mother was discharged on the third post-operative day. Serum β-hCG levels were both zero on the sixth post-operative week and on the monthly follow-up, until six months after delivery.

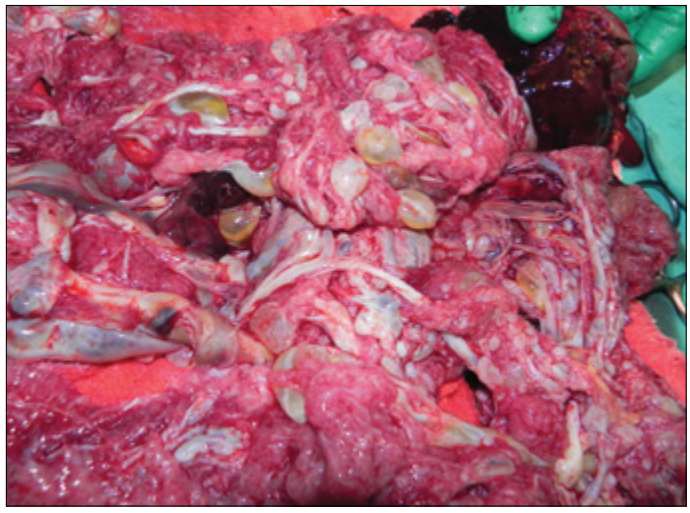

Figure 3. The morphological appearance of the placenta

Discussion

In several studies, the incidence of CMCF has been reported to be between 1/10000 and 1/100000 (1-4). Diagnosis is usually made by first-trimester ultrasound examination (2). In those cases, vaginal haemorrhage was found to be most common complaint at admission to the hospital (1-4). Serum levels of β-hCG are usually high at the time of admission, but it should be kept in mind that β-hCG levels may be high in multiple gestations (2). A high level of β-hCG at the time of admission may be an indication of poor prognosis of the disease (1).

Partial and complete molar pregnancies have obvious foetal and maternal risks (2). Thus, such pregnant women should be followed more carefully in specialised centres. It is usually recommended to terminate a partial or complete hydatidiform mole if it is detected early in the course of pregnancy (1, 2). Written informed consent should be taken from the family because of probable risks of these pregnancies if they choice to maintain the pregnancy (2).

Ongura et al. (5) presented a case who had a complete mole coexistent with a twin foetus. Her pregnancy was terminated by hysterectomy due to massive haemorrhage. The second patient published by Suri et al. (6) presented to hospital in the 28th week of gestation with signs of intrauterine infection. Her pregnancy was terminated in week 28 of gestation by hysterectomy following the development of systemic inflammatory response and a live male infant was born. Pathological examination supported molar pregnancy and bacterial abscess. Klatt et al. (7) reported a case in the third gestational week with vaginal haemorrhage. Her pregnancy was terminated on the 31st gestational week by hysterectomy upon increasing vaginal haemorrhage and foetal distress; an intrauterine balloon was inserted prophylactically for postpartum haemorrhage.

It is appropriate to evaluate the placenta by Doppler ultrasound examination in early gestational weeks to exclude placenta accreta; occasionally, MRI may be needed for the posterior side placenta and it may be necessary for the assessment of the depth of myometrial and parametrial involvement (8).

The optimal management of CHCF is controversial, especially when the pregnancy is desired. The management may be altered due to coexisting complications, such as hypertension, pre-eclampsia, thyrotoxicosis and vaginal haemorrhage. The aim of the management should be to avoid complications and to plan delivery at the most appropriate time for both maternal and foetal well-being. Performing the surgical intervention by an experienced surgical team would be more appropriate for avoiding complications that could occur during operation. One should be alert for severe and serious postpartum haemorrhage that may be caused by placenta previa as well as molar pregnancy and the necessary surgical instruments and materials should be prepared prior to operation.

In conclusion, we can say that it should be advised to terminate such pregnancies in order to prevent maternal and foetal risks. However, one should keep in mind that such pregnancies may result in live births with careful follow-up. Also, one should be alert for the possibility of gestational trophoblastic neoplasia following termination of the pregnancy.

Ethics Committee Approval: *N/A.*

Informed Consent: *Written informed consent was obtained from patient who participated in this study.*

Peer-review: *Externally peer-reviewed.*

Author contributions: *All authors contributed equally during the preparation of this manuscript.*

Conflict of Interest: *No conflict of interest was declared by the authors.*

Financial Disclosure: *The authors declared that this study has received no financial support.*

References

1. Bruchim I, Kidron D, Amiel A, Altaras M, Fejgin MD. Complete hydatidiform mole and a coexistent viable fetus: report of two cases and review of the literature. Gynecol Oncol 2000; 77: 197-202. [CrossRef]
2. Vaisbuch E, Ben-Arie A, Dgani R, Perlman S, Sokolovsky N, Hagay Z. Twin pregnancy consisting of a complete hydatidiform mole and co-existent fetus: Report of two cases and review of literature. Gynecol Oncol 2005; 98: 19-23. [CrossRef]
3. Kashimura Y, Tanaka M, Harada N, Shinmoto M, Morishita T, Morishita H, Kashimura M. Twin pregnancy consisting of 46, XY heterozygous complete mole coexisting with a live fetus. Placenta 2001; 22: 323-7. [CrossRef]
4. Aguilera M, Rauk P, Ghebre R, Ramin K. Complete hydatidiform mole presenting as a placenta accreta in a twin pregnancy with a coexisting normal fetus: Case report. Case Rep Obstet Gynecol 2012; 2012: 405085.
5. Ogura T, Katoh H, Satoh S, Tsukimori K, Hirakawa T, Wake N, Nakano H. Complete mole coexistent with a twin fetus. J Obstet Gynaecol Res 2006; 32: 593-601. [CrossRef]
6. Suri S, Davies M, Jauniaux E. Twin pregnancy presenting as a praevia complete hydatidiform mole and coexisting fetus complicated by a placental abscess. Fetal Diagn Ther 2009; 26: 181-4. [CrossRef]
7. Klatt TE, Franciosi RA, Cruikshank DP. Normal fetus with a twin presenting as both a complete hydatidiform mole and placenta previa. Obstet Gynecol 2006; 107: 527-30. [CrossRef]
8. Kirkinen P, Helin-Martikainen HL, Vanninen R, Partanen K. Placenta accreta: Imaging by gray-scale and contrast-enhanced color Doppler sonography and magnetic resonance imaging. J Clin Ultrasound 1998; 26: 90-4. [CrossRef]