

Partial hydatidiform mole in a postmenopausal IVF pregnancy, retrospective diagnosis: A case report

Solwayo Ngwenya

ABSTRACT

Introduction: Partial hydatidiform mole pregnancies are very rare. Very few clinicians will come across them during their clinical careers. Partial hydatidiform mole pregnancies that progress have life-threatening obstetric complications. Very few cases of partial hydatidiform mole pregnancies in postmenopausal women have been described in literature. **Case Report:** A 56-year-old postmenopausal woman presented with a pregnancy following in vitro fertilization (IVF) treatment. She had her pregnancy complicated by hypertension and intrauterine growth restriction. She delivered by a Cesarean section. A genotypically normal looking baby boy was extracted. The neonate died after three days. Histopathological examination revealed a partial hydatidiform mole. **Conclusion:** Partial hydatidiform mole pregnancies can cause maternal mortality and morbidity. Fetal outcomes are generally poor.

Keywords: Fetal outcomes, HELLP syndrome, Life-threatening, Partial hydatidiform mole, Postmenopausal IVF pregnancy, Preeclampsia

How to cite this article

Ngwenya S. Partial hydatidiform mole in a postmenopausal IVF pregnancy, retrospective diagnosis: A case report. J Case Rep Images Gynecol Obstet 2016;2:49–52.

Article ID: 100018Z08SN2016

doi:10.5348/Z08-2016-18-CR-11

INTRODUCTION

Partial hydatidiform mole pregnancies are rare and are characterized by having 69 rather than 46 chromosomes, the extra chromosomes usually due to fertilization of an ovum by two sperms [1]. The reported incidence is 0.005–0.01% of all pregnancies [2]. They can occur following natural conception or an IVF cycle [3]. Life-threatening complications can occur such as proteinuric hypertension early in the second trimester of pregnancy [4] and eclamptic seizures [5].

CASE REPORT

A 56-year-old postmenopausal woman presented with a six-week pregnancy. She had been to neighboring South Africa for in-vitro fertilization using a donor egg of a 24-year-old woman and paternal sperms. Her husband was aged 60. They had battled subfertility for years with numerous failed IVF cycles in South Africa. This had been

Solwayo Ngwenya

Affiliations: ¹MBChB, DFRH, MRCOG, Consultant Obstetrician & Gynaecologist, Head of Department of Obstetrics & Gynaecology, Mpilo Central Hospital, Vera Road, Mzilikazi, Founder & Chief Executive Officer, Royal Women's Clinic, 52A Cecil Avenue, Hillside, Bulawayo, Matabeleland, Zimbabwe.

Corresponding Author: Mr. Solwayo Ngwenya MBChB, DFRH, MRCOG, Consultant Obstetrician & Gynaecologist, Head of Department of Obstetrics & Gynaecology, Mpilo Central Hospital, Vera Road, Mzilikazi, Founder & Chief Executive Officer, Royal Women's Clinic, 52A Cecil Avenue, Hillside, Bulawayo, Matabeleland, Zimbabwe; Email: drsolngwe@yahoo.co.uk

Received: 13 April 2016

Accepted: 03 June 2016

Published: 20 June 2016

the first successful IVF pregnancy. She had a history of an ectopic gestation and a right salpingectomy done in the past. She had no medical disorder and had no known allergies.

On examination her blood pressure was 130/85 mmHg and she had a BMI of 30 kg/m². She had a midline scar on her abdomen. Her initial booking test results were as follows; hemoglobin 14 g/dl, white blood cell count 4.52/cm³, platelets 298, blood group B Rhesus positive, Hepatitis B surface Ag negative, Rubella IgG positive, HIV negative and mid-stream urine clear of any infection. All these tests were within normal ranges. The Downs screening done at 13 weeks was reported as low risk.

At 16th week gestation she complained of swollen feet and her blood pressure was slightly elevated at 140/90. Urinalysis was normal. She was commenced on methyldopa 500 mg four times a day. She was monitored fortnightly. A fetal anatomy ultrasound scan at 20th week gestation was reported as normal.

At 25th week gestation, she complained of increasing swelling of her legs and epigastric pains. Her blood pressure and urine dipstick test remained normal. She was commenced on a thromboprophylactic dose of enoxaparin 20 mg subcutaneously once daily.

Serial ultrasound scans for growth, liquor volume and umbilical artery Doppler were started from 28 weeks of gestation. At 30th week gestation the fetus was found to be having growth restriction and abnormal umbilical artery Doppler. The patient also had worsening gross swelling of her feet up to the knees. Therefore, a decision to deliver her was made. She was admitted to hospital for corticosteroid therapy. She received dexamethasone 6 mg intramuscularly twice a day for two days for fetal lung maturation. Hematological examination showed hemoglobin 12 g/dl, white blood cell count 10, platelets 301. These were normal. Liver function tests were total protein 66 g/l, albumin 43.8 g/l, total bilirubin 5.2 umol/l, ALT 45 u/l, ALP 105 μ/l, AST 28 u/l and GGT 28.8u/l. These were within normal ranges. Urea was 2.0 mmol/l, creatinine 49 umol/l, Na⁺ 145 mmol/l, K⁺ 4.6 mmol/l, Cl⁻ 105 mmol/l, these were also normal for a pregnant patient. There was no proteinuria and the clotting screen was also normal.

A cesarean section was done and a phenotypically normal looking baby boy was delivered weighing 1020 g, with Apgar score of 5, 8 and 8 at 1, 5 and 10 minutes respectively. The placenta looked macroscopically abnormal with cystic areas (Figure 1). It weighed 426 g and was sent for histopathological examination.

The baby was sent to the special care baby unit but died of respiratory distress syndrome three days later. The postoperative period was uneventful for the mother. The couple needed intense counseling as this was a devastating loss to them after years of trying to have a baby.

The histopathological report concluded that it was a partial mole. There are no facilities for doing chromosomal

studies in the low-resource setting where this case was managed. The couple counselled about these results and the need for close follow-up with serial β-hCG levels. Unfortunately, she was lost to follow-up.

DISCUSSION

The diagnosis of a partial hydatidiform mole presents with clinical problems for the clinicians and the parents [6]. They can exist alone or co-exist with a singleton or twin gestations [7]. The pregnancy can be ongoing but the mother may suffer complications as what happened to the case presented. Such complications include early onset pre-eclampsia [8, 9], eclampsia [5], imminent/severe HELLP syndrome [10, 11], proteinuric hypertension [4] and non-proteinuric hypertension as happened in this case. Serious uterine hemorrhage may also occur [6].

Fetal complications that may occur include an association with trisomy [12, 13], intrauterine growth restriction, intrauterine death [14], oligohydramnios, abnormal umbilical artery Doppler [15] and severe neonatal anemia [16].

Preimplantation cytogenetic testing can screen blastocysts that are abnormal. Clinically, the patient may present with per vaginal bleeding leading to serum testing for β-hCG levels. Ultrasonography can reveal either a grossly enlarged placenta, cystic placental spaces or a well formed but growth restricted fetus either alive or dead [14]. In the case presented, an ultrasound scan did not reveal any abnormal placental findings but found a growth restricted fetus. The ultrasound probably missed the gross placental abnormalities due the quality of the machine used. Prenatal cytogenetic analysis after amniocentesis or chorionic villus sampling is diagnostic [5]. Fetal genotype in a partial hydatidiform mole can either be 69XXY [5, 7] or rarely 69XXX [9, 10].

Fetal outcomes are mostly poor [2] and pregnancies may be terminated [8] when serious complications arise

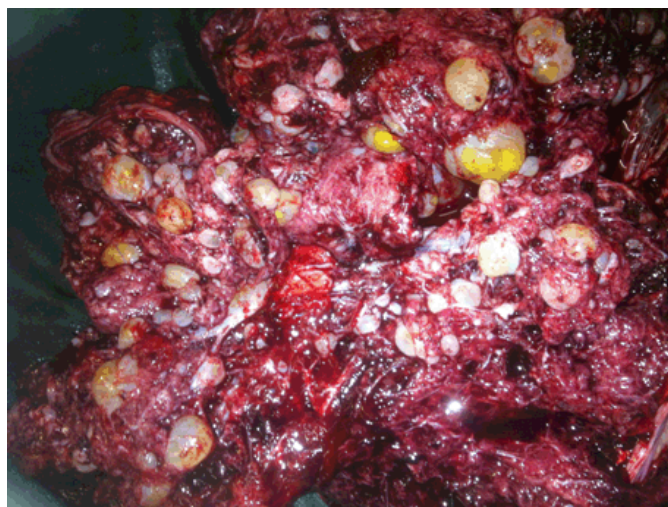


Figure 1: A photograph of a placenta taken the time of delivery showing round yellowish vesicles.

[6]. On rare occasions there may be a genotypically normal baby being born [16].

Patients should be followed-up with serial serum β -hCG levels [17] until they are undetectable, avoiding falling pregnancy during the surveillance period. Partial hydatidiform moles are considered less virulent [17] than complete hydatidiform moles in terms of progression to persistent trophoblastic disease.

CONCLUSION

Partial hydatidiform mole pregnancy is a rare condition that can be life-threatening. Pregnancies may be terminated to save pregnant women which can generate emotional distress. Fetal outcomes are generally poor. Expert counseling by a skilled clinician is therefore needed. Justifying IVF therapy in postmenopausal patients becomes very difficult both clinically and ethically.

Author Contributions

Solwayo Ngwenya – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

Guarantor

The corresponding author is the guarantor of submission.

Conflict of Interest

Authors declare no conflict of interest.

Copyright

© 2016 Solwayo Ngwenya. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.

REFERENCES

1. Savage P, Sebire N, Dalton T, Carby A, Seckl MJ, Fisher RA. Partial molar pregnancy after intracytoplasmic sperm injection occurring as a result of diploid sperm usage. *J Assist Reprod Genet* 2013 Jun;30(6):761–4.
2. Agarwal R, Agarwal S, Roy KK, Kumar S. Diploid partial mole with neonatal survival—a case report. *Indian J Pathol Microbiol* 2005 Apr;48(2):225–7.
3. Ibrahim ZH, Matson PL, Buck P, Atkinson AD, Lieberman BA. Hydatidiform mole following in-vitro fertilization. Case report. *Br J Obstet Gynaecol* 1989 Oct;96(10):1238–40.

4. Rahimpanah F, Smoleniec J. Partial mole, triploidy and proteinuric hypertension: two case reports. *Aust N Z J Obstet Gynaecol* 2000 May;40(2):215–8.
5. Wolf H, Leschot NJ, van den Kroonenberg MT, Walford N, Lammes FB. Prenatal diagnosis of triploidy. [Article in Dutch]. *Ned Tijdschr Geneesk* 1990 Feb 24;134(8):394–7.
6. Beinder E, Voigt HJ, Jäger W, Wildt L. Partial hydatidiform mole in a cytogenetically normal fetus. [Article in German]. *Geburtshilfe Frauenheilkd* 1995 Jun;55(6):351–3.
7. Sun CJ, Zhao YP, Yu S, et al. Twin pregnancy and partial hydatidiform mole following in vitro fertilization and embryos transfer: a novel case of placental mosaicism. *Chin Med J (Engl)* 2012 Dec;125(24):4517–9.
8. Zahradka M, Zahradka W. Partial hydatidiform mole-phenotype of triploidy. [Article in German] *Zentralbl Gynakol* 1988;110(20):1315–7.
9. Lembet A, Zorlu CG, Yalçın HR, Seçkin B, Ekici E. Partial hydatidiform mole with diploid karyotype in a live fetus. *Int J Gynaecol Obstet* 2000 May;69(2):149–52.
10. Falkert A, Yildiz A, Seelbach-Goebel B. Partial mole with fetal triploidy as a cause for imminent HELLP-syndrome at 16 weeks of gestation. *Arch Gynecol Obstet* 2009 Mar;279(3):423–5.
11. Stefos T, Plachouras N, Mari G, Cosmi E, Lolis D. A case of partial mole and atypical type I triploidy associated with severe HELLP syndrome at 18 weeks' gestation. *Ultrasound Obstet Gynecol* 2002 Oct;20(4):403–4.
12. Has R, Ibrahimoglu L, Ergene H, Ermis H, Basaran S. Partial molar appearance of the placenta in trisomy 13. *Fetal Diagn Ther* 2002 Jul-Aug;17(4):205–8.
13. Jauniaux E, Halder A, Partington C. A case of partial mole associated with trisomy 13. *Ultrasound Obstet Gynecol* 1998 Jan;11(1):62–4.
14. Naumoff P, Szulman AE, Weinstein B, Mazer J, Surti U. Ultrasonography of partial hydatidiform mole. *Radiology* 1981 Aug;140(2):467–70.
15. Jauniaux E. Partial moles: from postnatal to prenatal diagnosis. *Placenta* 1999 Jul-Aug;20(5-6):379–88.
16. Hsieh CC, Hsieh TT, Hsueh C, Kuo DM, Lo LM, Hung TH. Delivery of a severely anaemic fetus after partial molar pregnancy: clinical and ultrasonographic findings. *Hum Reprod* 1999 Apr;14(4):1122–6.
17. Watson EJ, Hernandez E, Miyazawa K. Partial hydatidiform moles: a review. *Obstet Gynecol Surv* 1987 Sep;42(9):540–4.

Access full text article on
other devices



Access PDF of article on
other devices

