

Ectopic Partial Molar Pregnancy: A Case Report

Malihe Amirian (MD)¹, Malihe Hasanzadeh (MD)^{2*}, Leili Hafizi (MD)¹

¹ Associate Professor, Women Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

² Professor, Women Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

ARTICLE INFO	ABSTRACT
Article type: Case report	Background & aim: Partial or complete hydatidiform mole (HM) affects approximately 1 in 1000 pregnancies. Partial mole is a rare form of ectopic pregnancy.
Article History: Received: 07- Apr-2015 Accepted: 22- Oct-2016	Case report: In this report, a female case (gravida 4, parity 1, abortion 1) with a history of right tubal ectopic pregnancy was presented.
Key words: Ectopic Gestational trophoblastic disease Pregnancy	Conclusion: A left ectopic pregnancy was detected and our case underwent laparoscopic left salpingectomy after failure of intramuscular methotrexate treatment. After the surgery, pathological examination revealed partial mole pregnancy.

► Please cite this paper as:

Amirian M, Hasanzadeh M, Hafizi L. Ectopic Partial Molar Pregnancy: A Case Report. Journal of Midwifery and Reproductive Health. 2017; 5(1):855-857. DOI: 10.22038/jmrh.2016.7830

Introduction

Today, the incidence of ectopic pregnancy (EP) increased 20 per 1000 pregnancies (1). Partial or complete mole affects approximately one in 500-1000 pregnancies. Therefore, the incidence of molar pregnancy is extremely rare (2). Given the increased incidence rate of this condition, the probability of a molar ectopic pregnancy would be the incidence of EP (0.02) multiplied by the incidence of molar pregnancy (0.001). While the exact cause of a molar pregnancy remains unknown, certain epidemiologic features of complete and partial mole differ markedly (3). Risk for partial mole is associated with the use of oral contraceptives and a history of irregular menstruation; however, dietary factors have no role in this regard (4). Although EP and molar pregnancies rarely occur, almost 40 cases of hydatidiform mole have been reported up to this day (4). In this report, a 25-year-old pregnant woman presenting with ectopic molar pregnancy was assessed.

Case report

A 28-year-old pregnant woman (gravida 4, parity 1, abortion 1, EP 1) referred to the emergency department of a hospital with slight

vaginal bleeding and retarded menstruation (five days) on June 20, 2012. A qualitative pregnancy test yielded positive results. Our case had normal menstrual cycles (every 28-30 days) and a history of right salpingectomy due to hemoperitoneum and rupture of right tube in her previous EP three years ago.

After the last salpingectomy, her contraception was withdrawal. Vital signs of the patient were stable upon admission to the emergency unit and general examination revealed normal results. No adnexal masses were detected after pelvic examination. Moreover, serum B-HCG was 4300 mIU/ml upon admission. Transvaginal ultrasonography demonstrated an empty uterus with an endometrial thickness of 5 mm and normal adnexa.

After 48 hours, B-HCG titer was 8900 mIU/ml and a repeat scan revealed an empty uterus with the presence of a hypoechoic mass (15×15 mm) beside the left ovary. Treatment of choice was methotrexate (MTX) therapy due to a history of right salpingectomy and lack of patient's authorization to undergo a specific medical surgery.

Liver function test, complete blood cell count and blood creatinine were within the normal range. Our case was administered with MTX (50

* Corresponding author: Malihe Hasanzadeh, Professor, Women Health Research Center, Mashhad University of Medical Sciences, Mashhad, Iran. Tel: 0513-8417493; Email: HasanzadeMofradM@mums.ac.ir

mg/m², intramuscularly) on June 22, 2012. Four days after the injection, her serum B-HCG titer increased to 14850 mIU/ml. At this point, ultrasound examination indicated an increase in the left ovarian heterogenic mass to 28×17 mm. Laparoscopy under general anesthesia was recommended for the patient on June 25, 2012. Some adhesion of small bowel and omentum to posterior surface of uterus without the right tube were observed in the case. Ampullary segment of the left tube was dilated and congested, and the left salpingectomy was performed. Following that, serum B-HCG titer decreased to 3444 mIU/ml on June 26.

Patient was discharged in good condition three days after the laparoscopic surgery. Pathological examination of the placenta revealed the presence of a partial hydatidiform molar pregnancy. In addition, results regarding the level of beta-HCG were unremarkable seven days, and one and three months after the surgery.

Discussion

In this report, a case was presented with a rare, ectopic molar pregnancy. While literature review revealed that the prevalence of molar pregnancy (partial or complete) is approximately one in 500–1000 pregnancies, there is still the possibility of a mole in the EP (4, 5). To date, 132 cases with this condition have been reported (6).

In a study by Burton et al., it was reported that partial hydatidiform mole in tubal ectopic is a rare occurrence, which is mostly overdiagnosed (7). We reviewed all pathological specimens of the patient and final diagnosis was confirmed. It is noteworthy that molar and non-molar EPs could not be differentiated based on differences in the B-HCG levels. Although B-HCG levels in tubal molar pregnancy increased in this report, they are usually lower than what is usually observed in a molar intrauterine pregnancy due to insufficient fertilization and vascularization in the fallopian tube (8).

While the level of B-HCG was high in this report, clinical diagnosis of a molar pregnancy is difficult and might lead to false positive diagnosis. Several risk factors for ectopic pregnancy have been identified, including previous EP, pelvic inflammatory disease, tubal ligation, tubal surgery and an intrauterine contraceptive device in place. Nevertheless, 75-50% of EPs have no

obvious risk factors (9).

Relying on presenting signs, symptoms or laboratory tests could not help us differentiate molar EP from patients with tubal pregnancies. In tubal gestational trophoblastic disease (GTD), vaginal bleeding and lower abdominal pain are commonly observed, followed by amenorrhea. However, 60% of females with ectopic gestations had ruptured tubal hydatidiform mole at the time of presentation, which is more than usual ectopic pregnancy (10). The present case had rupture of molar ectopic pregnancy after admission.

Some of the symptoms of hydatidiform mole are abdominal pain and vaginal bleeding (10). This condition can also mimic the usual symptoms of ectopic pregnancy. In the present case, late diagnosis occurred due to lack of any specific sign or symptom. Management of ectopic molar gestation should include immediate surgical removal of contraceptives. Laparoscopic therapeutic intervention has been regarded as the gold standard to diagnose such conditions (11). Since the majority of molar EP patients have ruptured fallopian tube upon admission, most of the patients undergo surgical salpingectomy (12).

Histopathology examination is needed for the diagnosis of hydropic products of conception, partial hydatidiform mole and complete hydatidiform mole. Final diagnosis is hard and there is a probability of error (7). Pathological examination in this case was according to partial molar pregnancy. Bercowits et al. revealed 66% of cured cases, and it seems that ectopic molar gestations have good prognosis similar to other forms of GTD (10).

Persistent tumor, usually non-metastatic, develops in approximately 2-4% of patients with a partial mole, and chemotherapy is required to achieve remission (13). Fortunately, the present patient had remission after the surgery.

Conclusion

Ectopic partial molar pregnancy is a rare condition and a high index of suspicion is needed to detect this condition. Moreover, pathological examinations are essential to the induction of ectopic pregnancy. In suspicious cases, level of serum B-HCG titer must be evaluated.

Acknowledgments

This research was not funded by the government or a private sector.

Conflicts of Interest

The authors declare no conflicts of interest.

References

1. Seyedoshohadaei F, Mohammadbeigi R, Tahmuri A, Ghaderi E. Frequency and related factors of tubal patency after methotrexate treatment in women with ectopic pregnancy. *Journal of Obstetrics and Gynaecology Research*. 2016; 42(3):286-290.
2. Stevens FT, Katzorke N, Tempfer C, Kreimer U, Bizjak GI, Fleisch MC, et al. Gestational trophoblastic disorders: an update in 2015. *Geburtshilfe und Frauenheilkunde*. 2015; 75(10):1043-1050.
3. Worley Jr MJ, Joseph NT, Berkowitz RS, Goldstein DP. Women with a partial mole during their first pregnancy and diagnosed earlier in gestation are at increased risk of developing gestational trophoblastic neoplasia. *International Journal of Gynecological Cancer*. 2014; 24(5):941-945.
4. Beena D, Tirthanath S, Jose V, Shetty J. Molar pregnancy presents as tubal ectopic pregnancy: a rare case report. *Journal of Clinical and Diagnostic Research: JCDR*. 2016; 10(1):ED10.
5. Sebire NJ, Lindsay I, Fisher RA, Savage P, Seckl MJ. Overdiagnosis of complete and partial hydatidiform mole in tubal ectopic pregnancies. *International Journal of Gynecological Pathology*. 2005; 24(3):260-264.
6. Burton JL, Lidbury EA, Gillespie AM, Tidy JA, Smith O, Lawry J, et al. Over-diagnosis of hydatidiform mole in early tubal ectopic pregnancy. *Histopathology*. 2001; 38(5):409-417.
7. Zhang Y, Zhao YY, Qiao J. Obstetric outcome of women with uterine anomalies in China. *Chinese Medical Journal*. 2010; 123(4):418-422.
8. Emoto M, Sadamori R, Hachisuga T, Kawarabayashi T, Miyamoto S. Clinical usefulness of contrast-enhanced color Doppler ultrasonography in invasive and noninvasive gestational trophoblastic diseases: a preliminary study. *The Journal of Reproductive Medicine*. 2011; 56(5-6):224-234.
9. Tabandeh A, Besharat M. Fever after cervical ectopic pregnancy; a case report from Gorgan, Iran. *Electronic Physician*. 2014; 6(4):944-946.
10. Leung F, Terzibachian JJ, Chung FB, Lassabe C, Knoepffler F, Maillet R, et al. Heterotopic ovarian hydatidiform mole. A case report. *Gynecologie, Obstetrique & Fertilité*. 2009; 37(9):749-751.
11. Hajenius PJ, Mol BW, Bossuyt PM, Ankum WM, Veen F. Interventions for tubal ectopic pregnancy. *The Cochrane Library*. 2007; 1:CD000324.
12. Vaishnav V. A very rare case of heterotopic pregnancy in natural conception with ectopic pregnancy as partial mole! *Journal of Obstetrics and Gynaecology of India*. 2014; 64(6):433-435.
13. Berkowitz RS, Goldstein DP. Current management of gestational trophoblastic diseases. *Gynecologic Oncology*. 2009; 112(3):654-662.