Complete Molar Pregnancy at Very Advanced Maternal Age

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ABSTRACT

We are presenting a case of a 57-year-old patient with a complete hydatidiform mole who was presented to the emergency department with heavy vaginal bleeding and symptomatic anemia. Pelvic ultrasound and level of serum beta-human chorionic gonadotropin (β -HCG). Histopathology showed secretory phase endometrium with aria Stella reaction and trophoblasts. Total abdominal hysterectomy and bilateral salpingo-oophorectomy were the best approaches for the patient to prevent the sequelae of gestational trophoblastic diseases. The serum β -HCG level significantly dropped during the follow-up period. Pregnancy rates during the perimenopause are extremely rare, and the majority of pregnancies that do occur at this age are abnormal2

Keywords : complete mole , vaginal bleeding , perimenopause , beta-human chorionic gonadotropin (β -HCG) , Hysterectomy

INTRODUCTION

Gestational trophoblastic disease (GTD) is more common in women of reproductive age. but occurs in postmenopausal, which is extremely rare¹. It includes a spectrum of conditions such as complete or partial hydatidiform mole (CHM and PHM), invasive mole, choriocarcinoma, and placental site trophoblastic tumor³. Hydatidiform mole is an abnormal type of pregnancy characterized by trophoblastic proliferation (both cytotrophoblast and syncytiotrophoblast) and vesicular swelling of placental villi associated with an absent or abnormal fetus or embryo³.

Disorders are more common in a complete mollar pregnancy, with the absence of fetal tisue, and their genetic material is mostly derived from duplication from the father's haploid set $(46xx)^4$. Age of the patient and previous history of hydatidiform mole are the two most common risk factors. At the age of <21 years and >35 years, the risk of having a complete mole is 1.9 times higher, and at age >40 years, the risk increases by 7.5 times². The aim of this case report is to present a very rare case of molar pregnancy in a perimenopausal woman.

CASE PRESENTATION

We are reporting a case of 57-year-old patient known to have hypertension referred from the emergency department at King Hamad University Hospital as a case of heavy vaginal bleeding. The patient presented with heavy vaginal bleeding for 5 days with passing clots. She is para 8; previous all normal vaginal deliveries; last childbirth was 20 years ago; her period is regular; she had the same attack of heavy bleeding before but didn't seek any medical advice for bleeding or for late menopause; she had only a scan 1 month before her presentation and was told she has a fibroid uterus; all labs were done for her in the emergency department, which showed a positive pregnancy test; beta-human chorionic gonadotropin (β-HCG) was 50000; and her hemoglobin was 8.1 gm/dl; and an ultrasound pelvis was requested for her, which showed Large complex solid pelvic mass showing innumerable variable-sized small cystic areas, roughly measuring ~16x11x13.5 cm? (could be representing cystic endometrial hyperplasia/carcinoma, less likely degenerated fibroid), patient discharged with urgent follow-up appointment in clinic as provisional diagnosis was given as choriocarcinoma of the uterus or endometrial carcinoma (Figure 1).

Patient presented again after 3 days to the emergency department with dizziness, palpitation, and heavy vaginal bleeding, so patient was admitted for blood transfusion of 3 units of PRBC as hemoglobin dropped from 8.5 to 7.9 and then 7.3 gm/dl in 3 days. The physical examination showed hemodynamic stability (blood pressure 158/78, pulse 95). On vaginal examination, the cervix was opened, and small tissue was obtained from the cervix. Transvaginal ultrasound showed vesicular mass inside the uterus matched with a complete mole. The tissue was sent for histopathology (Figure 2), and the result confirmed a complete mole. On the other hand, the thyroid stimulation test was low, matching a picture of hyperthyroidism secondary to a complete mole. Brain MRI and CT chest were done to exclude gestational trophoblastic neoplasia; all were negative for any lesions. The decision was taken for total abdominal hysterectomy and bilateral salpingo oophorectomy in view of patient age and continuous vaginal bleeding, patient received 2 units of PRBC intraoperatively and was stable during her period of admission. BHCG was followed after the procedures 6149 (Day 1), 1593 (Day 7), and 288 (Day 14), then dropped to BHCG 70 on day 26 and became negative after 1 month from the procedure (Figure 3).



Figure 1. Showing ultrasound for molar pregnancy (honeycomb appearance)

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Figure 2. Showing gross picture of suction of molar materials

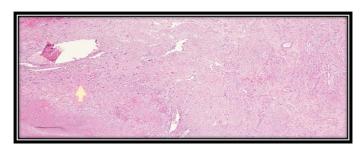


Figure 3. Histopathology of molar pregnancy The arrow shows the invasion of molar component to the uterine myometrium

DISCUSSION

Molar pregnancies can be subdivided into complete and partial molar pregnancies based on genetic and histopathological features. Molar pregnancies are categorized into complete and partial types based on genetic and histopathological characteristics. Gestational trophoblastic disease (GTD), which includes hydatidiform mole, invasive mole, choriocarcinoma, and placental site trophoblastic tumor (PSTT), is relatively rare. Research indicates ethnic differences in the incidence of GTD within the UK, showing higher rates among Asian women compared to non-Asian women (1 in 387 versus 1 in 752 live births, respectively). The occurrence of GTD is also linked to the age at conception, with increased rates at the age extremes (1 in 500 pregnancies for women under 15 years old and 1 in 8 pregnancies for women over 50 years old). Gestational trophoblastic neoplasia (GTN) can arise following a molar pregnancy, a non-molar pregnancy, or a live birth, with an incidence of 1 in 50,000. Following a live birth^{5,6,7}. The risk for women over 40 increases significantly, by approximately 7.5 times². Tsukamoto et al. documented 20 cases of GTD in women over 50, including 25 hydatidiform moles, 40 invasive moles, and 25 choriocarcinomas. Detecting GTD in women over 50 is challenging due to the expectation of menopause and the frequent oversight or dismissal of the possibility of pregnancy8.

Vaginal bleeding is the predominant symptom in molar pregnancies, being present in about 60% of cases⁹. Less frequent scenarios involve hyperthyroidism onset pre-eclampsia or abdominal distention caused by theca lutein cysts. In instances, women might exhibit symptoms like coughing up blood, sudden respiratory issues, or neurological signs such, as seizures, which are probably linked to metastatic spread9. These presentations have matched the case we have in hand, which presented to the emergency department with irregular vaginal bleeding and symptomatic anemia at the age of 57.

Diagnosing GTD in women, above the age of 50 can pose challenges due to the assumption of menopause, which can sometimes result in overlooking or dismissing the possibility of pregnancy¹⁰. The diagnostic procedure involves a review of history, checking β HCG levels, conducting a gynecologic examination, and performing pelvic ultrasonography. Ultrasonography stands out as the method for diagnosing molar pregnancies, which are identified by the distinctive "snowstorm" appearance caused by hydropic degeneration, in the chorionic villi^{8,11}.

Ultrasound technology used in the stages of pregnancy has made it possible to detect pregnancy sooner. Studies conducted by Soto Wright et al. revealed a trend of diagnosing pregnancy, at gestational ages, with the average age decreasing from 16 weeks in the period between 1965 and 1975 to 12 weeks from 1988 to 1993. Recent data shows a decrease in the gestational age at diagnosis to 9 weeks from 1994, to 2013 (9). A study involving women who visited an early pregnancy unit found that ultrasound accurately diagnosed 88.2% of complete molar pregnancies and 56% of partial molar pregnancies^{9,12}.

Depending on factors such as age, desire for future fertility, and the ability to adhere to follow-up care after molar evacuation, treatment options include suction curettage, chemotherapy, or hysterectomy $^{\!\!13}$. Advanced maternal age increases the likelihood of spontaneous abortion or molar pregnancy, as might have occurred with our patient. The incidence of malignant postmolar sequelae following suction curettage is reported to be 56.3% in women over 50 years old. Hysterectomy offers the benefit of concurrent treatment, sterilization, and a reduction in the risk of developing postmolar gestational trophoblastic tumor (GTT) $^{\!\!14}$. Nonetheless, there remains an 8–20% risk of postmolar GTT in elderly patients after hysterectomy, thus necessitating regular monitoring with serum β -HCG $^{\!\!14,15}$. Given that our patient was postmenopausal and had no further fertility aspirations, we opted for hysterectomy.

CONCLUSION

While molar pregnancy in postmenopausal women is extremely uncommon, the potential for severe complications necessitates including gestational trophoblastic disease (GTD) in the differential diagnosis to avoid delays in treatment. Given the significantly elevated risk of malignant post molar sequelae following suction curettage in postmenopausal women , so complete hysterectomy should be performed to avoid significant complications such as bleeding, hypovolemic shock, and the risk of GTN.

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Competing Interest: None

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REFERENCES

- 1. Atrash HK, Hogue CJ, Grimes DA. Epidemiology of hydatidiform mole during early gestation. AJOG. 1986 Apr 1;154(4):906-9.
- Begum J, Palai P, Ghose S. Complete molar pregnancy in postmenopausal women. Journal of Mid-life Health. 2016 Apr 1;7(2):91-3.

- 3. Fatusic J, Hudic I. Complete molar pregnancy in postmenopausal woman-a case report. Medical Archives. 2019 Dec;73(6):436.
- Tham BW, Everard JE, Tidy JA, et al. Gestational trophoblastic disease in the Asian population of Northern England and North Wales. BJOG 2003; 110: 555–9.
- Savage PM, Sita-Lumsden A, Dickson S, et al. The relationship of maternal age to molar pregnancy incidence, risks for chemotherapy and subsequent pregnancy outcome. J Obstet Gynaecol 2013; 33: 406–11
- 6. Gockley AA, Melamed A, Joseph NT, et al. The effect of adolescence and advanced maternal age on the incidence of complete and partial molar pregnancy. Gynecol Oncol 2016; 140: 470–3.
- 7. Ciebiera, Michał et al. "Molar Pregnancy with a Coexisting Live Fetus as a Challenge for Perinatology. A Mini-Review with Two Case Reports." J. Health Inequal 4.1 (2018): 39–45. Web.
- 8. Tidy J, Seckl M, Hancock BW, on behalf of the Royal College of Obstetricians and Gynaecologists. Management of Gestational Trophoblastic Disease. BJOG 2021;128:e1–e27.

- 9. Bandy LC, Clarke-Pearson DL, Hammond CB. Malignant potential of gestational trophoblastic disease at the extreme ages of reproductive life. Obstet Gynecol. 1984;64(3):395-9.
- 10. Folwer D, Lindsay I, Seckl M, Sebire N. Routine preevacuation ultrasound diagnosis of hydatiform mole: Expirience of more than 1000 cases from a regional referral center. Ultra-sound Obstet Gynecol. 2006; 27: 56-60. doi: 10.1002/uog.2592
- 11. Ross JA, Unipan A, Clarke J, et al. Ultrasound diagnosis of molar pregnancy. Ultrasound 2018;26:153–9.
- Lurain JR. Gestational trophoblastic disease I: epidemiology, pathology, clinical presentation and diagnosis of gestational trophoblastic disease, and management of hydatidiform mole. AJOG. 2010 Dec 1;203(6):531-9.
- Davidson SA, Gottesfeld J, La Rosa FG. Molar pregnancy in a 60-year-old woman. Int. J. Gynaecol. Obstet.1997 Jan;56(1):53-5.
- 14. Bagshawe KD, Dent J, Webb J. Hydatidiform mole in England and Wales 1973-83. Lancet 1986;2:673-7