

**Open Access** 

# Invasive Molar Pregnancy in a Woman Aged 54 Years A Case Report Cringu Antoniu Ionescu<sup>1,2\*</sup>, Mariana Bragaru<sup>2</sup>, Iulia Maria Tarcomnicu<sup>2</sup>, Camelia Teodora Vladescu<sup>3</sup> and Mihai Dimitriu<sup>1</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology, "Carol Davila" University of Medicine and Pharmacy, Bucharest, Romania <sup>2</sup>Department of Obstetrics and Gynaecology, "St. Pantelimon" Clinical Emergency Hospital, Bucharest, Romania <sup>3</sup>Department of Pathology, "St. Pantelimon" Clinical Emergency Hospital, Bucharest, Romania

### Abstract

We reported a 54-year-old patient with a complete hydatidiform mole invasive in myometrium. This diagnostic was suggested by irregular vaginal haemorrhage, amenorrhea and reduced nausea. Our paraclinical investigation was: pelvic ultrasound and level of serum beta-human chorionic gonadotropin ( $\beta$ -hCG). Endovaginal ultrasound reveal enlarged uterus volume, with dimensions 12/15/8 cm, with the presence of multiple nodular formations located intramural and subserosal and a mass with Doppler rich blood supply through myometrium and endometrium. The level of  $\beta$ -hCG was 28099.00 mIU/L. Therapeutic method applied was abdominal hysterectomy and bilateral salpingo-oophorectomy. Anatomopathological report revealed a complete invasive mole and endometrial polyp. After the surgical intervention the patient was treated with Methotrexate as prophylactic chemotherapy recommended by oncologists because of the invasive character of mole and age of patient. The complete invasive mole is a benign tumor that is characterized by abnormal proliferation of trophoblast and is locally invasive and possible metastatic. Developing pregnancy rate in perimenopause period is very rare and most of the pregnancies that occur at this age are abnormal, spontaneous abortion occurring most often. We choose to report this case to emphasize that this condition can occur in a relatively advanced age, especially during perimenopause period.

Keywords: Invasive mole; Complete mole; Menopause

## Introduction

Gestational trophoblastic disease is characterized by abnormal proliferation of trophoblastic tissue. The short classification is: partial hydatidiform mole, complete mole, invasive mole, placental site trophoblastic tumor, placental site nodule and plaque, epithelioid trophoblastic tumor, exaggerated placental site reaction and choriocarcinoma [1,2]. A molar pregnancy occurs at fertilization, when instead of a normal pregnancy, evolve a mass of cysts. The complete molar pregnancy is a non-cancerous tumor that develops in the uterus. In its composition is no placental or embryo normal tissue. The invasive mole (chorioadenomadestruens) is a form of complete molar pregnancy evolution [3]. Although this disease is characterized by an aggressive development it is actually locally invasive usually without distance dissemination, but sometimes can also occur distant metastases . It is defined as a category of mole that penetrates and may even perforate the uterine wall. Rarely, can spread to other organs such as: vagina, vulva and lung. Macroscopic is characterized by trophoblastic invasion of myometrium with villous structures. Microscopic is characterized by citotrofoblast hyperplasia, syncytial elements and villous structures persistence [3,4]. The invasive mole can be distinguished from choriocarcinoma by the presence of villi. An invasive mole develops in approximately 10-20% of patients after molar evacuation and infrequently after other gestations.

# **Description of Case**

A 54-year-old Caucasian woman, from urban society, was hospitalized in Department of Obstetrics and Gynaecology "St. Pantelimon" Clinical Emergency Hospital, Bucharest with heavy vaginal bleeding for last one day. Her first pregnancy had been in 1989, and the second had been a twin pregnancy in 1991, full-term spontaneous births. Her second delivery was at the age of 30. From the personal physiological history, the patient had two miscarriages, never used any COCs (Combined Oral Contraceptives) or other hormonal therapy, with no history of comorbidities and collateral disease. At admission she presented irregular menstrual bleeding in the last year the patient has normal weight and she has a medium socioeconomic status. She arrived in our hospital complaining for persistent vaginal haemorrhage for the last two months, associated with reduced nausea and four months of amenorrhea. Physical examination was normal. After gynaecological exam we found an enlarged uterus volume as a 12week pregnancy, consistency firmly, irregular shape. The speculum and bimanual examination demonstrated a healthy cervix with abundance uterine bleeding. Blood analysis as hemoleucograma, coagulograma, liver enzymes, glucose, urea, and creatinine were normal. Endovaginal ultrasound examination showed enlarged uterus volume, with dimensions 12/15/8 cm, with the presence of multiple nodular formations located intramural and subserosal. Endometrial thickness of 1.8 cm, diffuse inhomogeneous with a vascular mass, with a rich blood supply in the myometrium and endometrium The left ovary present a transonic formation 4.63/3.68 cm. Right ovary was normal, without liquid in cul-de-sac Douglas (Figure 1). In our diagnostic algorithm the possibility of a fibromatous uterus was considered. Other etiologies of endometrial bleeding like endometrial benign or malign pathologies or ovarian pathologies were possible. A normal or pathological pregnancy at this age was not estimate.

In 31 October, 2014 the patient was hospitalized, was performed a dilatation and curettage. The tissue that was extracted was macroscopic irrelevant. After three weeks the hystopathological report revealed chorionic villis and stromal degeneration (molar villi), compatible with a complete hydatidiform mole (Figure 2). In 25 November, 2014, our patient was admitted to hospital for serum measurement of beta-chorionic gonadotropin ( $\beta$ -hCG) which was 28099.00 mIU/L and for preoperative preparation. Blood analyses, group and Rh factor were completed with abdominal ultrasound examination, chest radiograph, CT thorax and abdomen - all were normal. Knowing the patient's age

Received January 31, 2016; Accepted March 08, 2016; Published March 13, 2016

Citation: Ionescu CA, Bragaru M, Tarcomnicu IM, Vladescu CT, Dimitriu M (2016) Invasive Molar Pregnancy in a Woman Aged 54 Years A Case Report. J Clin Case Rep 6: 733. doi:10.4172/2165-7920.1000733

**Copyright:** © 2016 Ionescu CA, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

<sup>\*</sup>Corresponding author: Cringu Antoniu Ionescu, MD, PhD, Department of Obstetrics and Gynaecology, Associate Professor, University of Medicine Carol Davila, Bucharest, Romania, Tel: +40213180862; E-mail: antoniuginec@yahoo.com



Figure 1: Transvaginal ultrasound: myomas of uterus with a thick Endometrium and cyst on right ovary.



Figure 2: Pathological report: Complete mole- syncytiotrofoblast area proliferated and citotrofoblast, HE staining x 20.

and its informed consent a laparotomy and hysterectomy with bilateral salpingo-oophorectomy were decided intraoperative examination showed volume enlarged uterus, irregular outline, with normal serosa, left ovary with a cystic formation, right ovary as normal, the rest intraabdominal organs were macroscopic normal histopathology showed a complete mole with myometrium invasion, so an invasive hydatiform mole, endometrial polyp, intramural leiomyoma, endocervical glandular hyperplasia, left ovarian dermoid cyst (Figure 3). The invasive mole was distinguished from choriocarcinoma by the presence of chorionic villi. In choriocarcinomas there are extensive areas of necrosis and haemorrhage and distinct absence of chorionic villi. There were not pre-, intra- and postoperative complications. After the surgical intervention the patient was treated with Methotrexate as prophylactic chemotherapy for six weeks. The treatment was recommended by oncologist because of invasive mole with potential to metastasis and of the age of patient. There was not done imunohystochemistry exam because the hospital didn't have the facilities after eight weeks of the surgical operation serum  $\beta$ -hCG level returned back to zero. In this condition the prognosis of our patient is favourable. The patient remains under oncology surveillance, with dosage regular of the serum  $\beta$ -hCG level. Rarely this disease may spread to other parts of the body, such as the vagina, vulva and lung.

### Discussions

Gestational trophoblastic disease (GTD) represents a class of lesions characterized by an abnormal proliferation of trophoblast. It is known that the appearance of pregnancy in perimenopause period is extremely low [1]. There are a number of factors that make both conception and a healthy pregnancy harder for older women. Perimenopause ovulation becomes irregular, making conception more difficult. Men



Figure 3: Pathological report: Syncitiotrofoblast proliferation, HE staining x 20.

are constantly producing new sperm, women are born with all eggs they will ever produce. By the time four decades have passed, those eggs have aged, increasing the chance of chromosomal abnormalities [4,5]. At the pregnancies that occur at this age, spontaneous abortion is most often. In that pregnancies that remain, the number of gestational trophoblastic disease is highly increased [1]. Its incidence increases at the extremes of reproductive age. Teenagers and perimenopause women are most affected by this disease [6]. All women of reproductive age may potentially develop a gestational trophoblastic disease [7,8]. This is the reason why histopathological analysis is necessary to exclude trophoblastic disease in all cases that are clinically indicated. Even more, suspicion should be high and should exclude the disease of a product of conception derived from miscarriages, in patients at extreme age [9,10]. It was assumed that our patient is in perimenopause period (no hormonal investigations were carried for this diagnosis) with irregular menstrual bleeding. First diagnosis considered was fibroid uterus. Any other causes of endometrial bleeding also were considered: endometrium, myometrium, ovary malignancies or benign injury. A trophoblastic disease was not estimate, and because of that  $\beta$ -hCG measurement was not performed initially. Most women will only need a minor surgery for a trophoblastic disease (biopsy curettage), to remove the molar tissue. But a small percentage of this will need chemotherapy. In case of our patient it was decided that a hysterectomy should be performed. No residual trophoblastic disease was found after the treatment with Methotrexate as prophylactic chemotherapy, and references of the  $\beta$ -hCG levels remain undetectable.

### Conclusion

The number of pregnancy in perimenopause period is very low. The incidence of molar pregnancy increases at the extremes of reproductive

Page 3 of 3

age, teenagers and perimenopause women. With this case that we have chosen we want to emphasize that this condition can occur in a relatively advanced age, especially during perimenopause period. Examining the tissue after a miscarriage in women at extreme ages should raise a suspicion of mole. Molar pregnancy should be excluded in this cases [9].

#### References

- 1. http://www.sajog.org.za/index.php/SAJOG/index .
- McDonald TW, Ruffolo EH (1983) Modern management of gestational trophoblastic disease. Obstet Gynecol Surv 38: 67-83.
- Black KI, Sakhaei T, Garland SM (2010) A study investigating obstetricians' and gynaecologists' management of women requesting an intrauterine device. Aust N Z J Obstet Gynaecol 50: 184-188.
- Lok CA, Zürcher AF, van der Velden J (2005) A case of a hydatidiform mole in a 56-year-old woman. Int J Gynecol Cancer 15: 163-166.

- Tsukamoto N, Iwasaka T, Kashimura Y, Uchino H, Kashimura M, et al. (1985) Gestational trophoblastic disease in women aged 50 or more. Gynecol Oncol 20: 53-61.
- Palmer JR (1994) "Advances in the epidemiology of gestational trophoblastic disease", J Reprod Med 39: 155-162.
- Bandy LC, Clarke-Pearson DL, Hammond CB (1984) "Malignant potential of gestational trophoblastic disease at the extreme ages of reproductive life," Obstet Gynecol 64: 395-399,
- Sebire NJ, Foskett M, Fisher RA, Rees H, Seckl M, et al. (2002) Risk of partial and complete hydatidiform molar pregnancy in relation to maternal age. BJOG 109: 99-102.
- Snijders RJ, Sebire NJ, Nicolaides KH. Maternal age and gestational age specific risk for chromosomal defects. Fetal Diagn Ther 1995; 10:356-367
- Di Cintio E, Parazzini F, Rosa C, Chatenoud L, Benzi G (1997) The epidemiology of gestational trophoblastic disease. Gen Diagn Pathol 143: 103-108.