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Invasive molar pregnancy in a woman aged 54 years. A case report

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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. The paraclinical investigations which suggest the diagnosis were: pelvic ultrasound and level of serum beta-human chorionic gonadotropin (β-hCG). Endovaginal ultrasound revealed enlarged uterus volume, with diameter of 12/15/8 cm, and 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 β-hCG was 28099.00 mIU/L. The treatment 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. 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: *molar pregnancy, perimenopause, beta-human chorionic gonadotropin*

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 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 appear 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 chorio-carcinoma by the presence of villi. An invasive mole develops in approximately 10-20% of patients after molar evacuation and infrequently after other gestations.

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Case Report

A 54-year-old Caucasian woman, from urban society, was hospitalized in Department of Obstetrics and Gynecology "St. Pantelimon" Clinical Emergency Hospital, Bucharest from Romania with heavy vaginal bleeding for the last two days. 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 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 hemorrhage for the last two months, associated with reduced nausea and four months of amenorrhea before. Physical examination was normal. After gynecological exam we found an enlarged uterus volume at a 12-week pregnancy, consistency firmly, and irregular in shape. The speculum and vaginal examination showed a clinical normal 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 was 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).

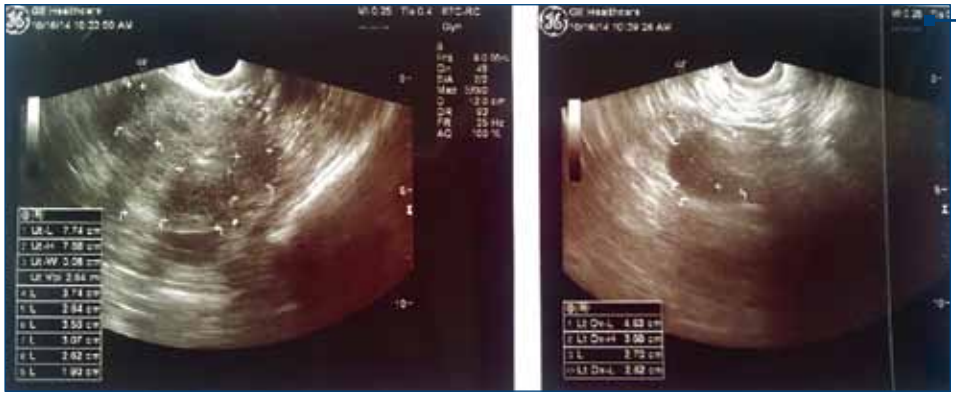

Figure 1. Transvaginal ultrasound: myomas of uterus with a thick endometrium and cyst on right ovary

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 also possible. A normal or pathological pregnancy at this age was not estimate.

In 31 October, 2014 the pacient was hospitalized, was performed a dilatation and curettage of endometrial cavity. The tissue that was extracted was macroscopic irrelevant. The hystopathological report revealed chorionic villis and stromal degeneration (e.g. molar villi), compatible with a complete hydatidiform mole (Figure 2).

On 25 November 2014, our pacient was admitted to hospital for serum measurement of beta-chorionic gonadotropin (β-hCG) which was 28099.00 mIU/L and for preoperative preparation. Blood analyzes, group and Rh factor were completed with abdominal ultrasound examination, chest radiograph, computed tomography thorax and abdomen was normal.

Considering the patient's age and after 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 of intraabdominal organs were macroscopic normal.

Histopathology revealed a complete mole with myometrium invasion, an invasive hydatiform mole, endometrial polyp, intramural leiomyoma, endocervical glandular hyperplasia, left ovarian dermoid cyst. 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 (Figure 3).

There were not pre-, intra- and post-operative 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 because of the age of patient. The imunohystochemistry exam was not further completed in our hospital.

After eight weeks since the surgical operation, serum β-hCG level returned back to zero. In this condition the prognosis of our patient was favorable. The patient

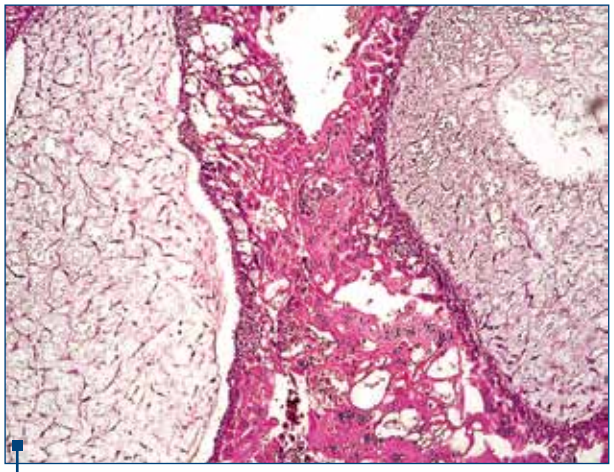

Figure 2. Pathological report: complete mole- syncytiotrofoblast area proliferated and citotrofoblast, HE staining x 20

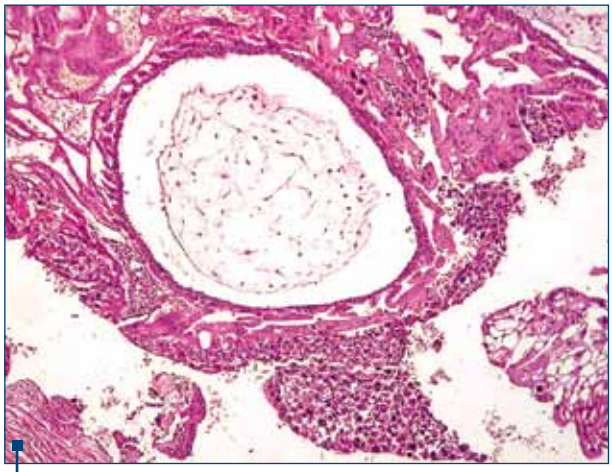

Figure 3. Pathological report: syncitiotrofoblast proliferation, HE staining x 20

remained under oncology surveillance, with regular dosage of the serum β-hCG level. Rarely this disease may spread to other parts of the body, such as the vagina, vulva and lung.

Discussion

Gestational trophoblastic disease 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 more difficult for older women. Perimenopause ovulation becomes irregular, making conception more difficult.

Men 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]. In pregnancies that occur at this age, spontaneous abortion is most often. In the 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 was in perimenopause period (e.g. with no other hormonal investigations were carried out 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 lesions.

A trophoblastic disease was not estimate, also because β-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[11]. In case of our patient it was decided that a hysterectomy should be performed considering the age, associated lesions and informed consent. No residual trophoblastic disease was found after the treatment with methotrexate as prophylactic chemotherapy, and references of the β-hCG levels remain undetectable.

Conclusions

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

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