Postmenopausal Pregnancy: A Case Report

Rafat Mirsafi[1], Mahtab Attarha[2]

[1]MSc Student of Midwifery Counseling, Students Research Committee, Arak University of Medical Sciences, Arak, Iran, [2]Department of Midwifery, School of Medicine, Arak University of Medical Sciences, Arak, Iran

Abstract

Abnormal vaginal bleeding is one of the complaints of women during menopause. Various diseases such as endometrial atrophy, polyps, and endometrial cancers may lead to postmenopausal vaginal bleeding. This report describes a case of postmenopausal vaginal bleeding caused by pregnancy. A 54-year-old woman referred to the prenatal clinic in Arak, Iran, with postmenopausal vaginal bleeding in 2018. Transabdominal ultrasound revealed an uterine pregnancy. At 28 weeks of gestation, she referred to the health center and her prenatal care began in the midwifery clinic. She gave birth to a baby girl at 34 weeks through a cesarian section. This case reminds practitioners and midwives that pregnancy may be one of the etiologies of postmenopausal vaginal bleeding especially in women with sexual activity. Therefore, a free beta-subunit human chorionic gonadotropin (HCG) hormone measurement should be conducted and if found to be elevated, followed by appropriate imaging tests.

Keywords: *Iran, menopause, pregnancy, uterine hemorrhage*

Introduction

Menopause is an event that occurs during the life of all women and indicates the end of their reproductive period due to permanent ovarian failure. It is a gradual process which occurs within the age range of 47–55 years for many women and is defined as the cessation of menstrual periods for 12 consecutive months without any physiologic and pathologic reason.[1] However, all other animals reproduce until their death. During this process, women enter a new era of their life which is associated with various symptoms and complications.[1] Abnormal Uterine Bleeding (AUB), varying from spotting to heavy bleeding, is one of the women's complaints during menopause.[2] Therefore, obtaining medical history, performing a physical examination, and monitoring patients based on diagnostic findings seems necessary.[2] In a study, vaginal bleeding was only associated with elevated Human Chorionic Gonadotropin (HCG) hormone.[3] In another study leech infestation was reported as the cause of vaginal bleeding, and reviewing studies since 1990 revealed only 2 cases of postmenopausal vaginal bleeding due to leech infestation.[2,3] In the current case, 7 years after the onset of menopause, "the patient's history of AUB led to a request for an abdominal ultrasound. Surprisingly, she was pregnant. Therefore, the authors decided to report this case.[4,5]

Case Report

The patient was a 54-year-old housewife (gravida 3, para 2, 1 living child, 1 deceased child) who lived in a village. She had been using an Intrauterine Device (IUD) for 12 years after her second delivery to prevent pregnancy and later, withdrawal method until her menopause. The onset of menopause was at the age of 47 and 1 year later, the patient experienced hot flashes, for which she has not sought any treatment. She never had a pap smear or mammogram. She reported no history of trauma or the use of hormonal medicines. At the age of 52 (05/06/2016), she lost her 24-year-old son (her second child) in a car accident and was subsequently diagnosed with hypertension and diabetes. She reported a history of using fluoxetine capsules (20 mg per day), methyldopa (3 times per day or TDS), metformin 500 mg (2 times per day or BID), and 5 units of insulin a day after the accident and before her pregnancy. She had encountered no problems in her two previous pregnancies. Unaware of her pregnancy

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Address for correspondence:
Dr. Mahtab Attarha, 38481-769410, Second Floor, Blue Wing, Educational Deputy Office, School of Nursing, Sardasht Building Complex, Arak University of Medical Sciences, Arak, Iran.
E-mail: m.attarha@arakmu.ac.ir; mahtab_at2004@yahoo.com

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(at 20 weeks pregnant), the patient referred to a general physician in her village with the complaint of vaginal bleeding associated with no pain.

Despite the physician's advice, she did not permit abdominal and vaginal examination. Therefore, he administered hormonal medications. For the first time in 14/3/2018, she referred herself to a health center in Arak, Iran, with the complaint of gradual abdominal enlargement and her pregnancy was diagnosed after requesting a transabdominal ultrasound at 28 weeks. Later, prenatal care was initiated. The patient did not continuously follow-up with her prenatal care. She was hospitalized due to vertigo and epistaxis caused by hypertension and hyperglycemia (350 mg/dL) at 34 weeks of gestation in another city. On 28/04/2018, she gave birth to a girl (weight: 1780 g; height: 47 cm; circumference of head: 33 cm; and Apgar score: 7.8) through the cesarean section with her gynecologist's opinion. The newborn was hospitalized in the Neonatal Intensive Care Unit (NICU) due to prematurity and icterus and was fed through a Nasogastric (NG) tube during this period. Her newborn was discharged from the hospital in good general condition 20 days after birth and formula feeding was continued.

After delivery, metformin 500 mg (BID) and amlodipine 5 mg were administered to the mother once a day instead of methyldopa. This information was obtained from the patient's medical file. On the third visit (45 days after delivery), the mother's blood pressure was 130/80 and the infant's weight was 2300 g. It should be noted that unfortunately the patient and her husband, especially her husband, did not effectively communicate with health providers. They were reluctant to answer questions and seemed to be very anxious and worried.

Ethical considerations

The authors certify that they have obtained a consent form from the patient. In the form, the patient has given her consent for her clinical information to be reported in the journal. The patient understood that her name and initials would not be published and due efforts would be made to conceal her identity.

Discussion

Various diseases may lead to vaginal bleeding, which is an alarm for both patients and healthcare providers during menopause. In addition to anemia, vaginal bleeding can indicate menopause-related disorders including vaginal atrophy (59%), endometrial hyperplasia (10%), endometrial polyp (9%), uterine cancer (5–10%), and bleeding related to the use of Hormone Replacement Therapy (HRT). Uncommon causes of postmenopausal bleeding include uterine fibroids, adenomyosis (often during HRT), cervical polyp and cancer, and vaginal, tubal, and ovarian cancer.[4,5]

HRT may cause vaginal bleeding when administered to women with a uterus. It has indications and contraindications by itself. For example, unexplained vaginal bleeding, a history of endometrial or ovarian neoplasm, acute liver injury, vascular embolization, breast cancer, poorly controlled diabetes, or hypertension are all contraindications of the treatment after menopause.[6] Therefore, prior to administration, risk assessment of HRT such as the presence of complications or existing medical conditions should be performed.[7]

The exact sequence of investigation for vaginal bleeding in postmenopausal women will certainly vary somewhat depending on the local resources, physician's or midwife's skills and judgments, and patient's preference. After obtaining the patient's medical history, a pelvic exam should be performed to look for visual evidence of lesions or bleeding from gynecologic (e.g., vulva, vagina, and exocervix) and non-gynecologic (e.g., periurethral perineum, and perianal) sources.[8] Furthermore, the practitioner should request or perform a Transvaginal Ultrasound (TVUS) examination[9] or tests which are of great importance. Upon the incidence of vaginal bleeding during menopause, most women may be further examined for cancer[4] or in our case for pregnancy. Without careful clinical judgment, diagnosing pregnancy during menopause is difficult. Postmenopausal pregnancies are rare and require additional care.[10] Menopause occurs after the age of 47–55 years. In women over 50 years of age, pregnancy is not expected and physicians may not even think of measuring the HCG level to diagnose pregnancy. Based on our knowledge and investigations, it seems that this case is the 745th case of postmenopausal pregnancy reported in 1997–2018.[3,11]

Abdul Amir reported two cases of pregnancy at the age of 51 and 58 years.[10] One of them referred to the hospital with vaginal bleeding 6 years after her menopause. However, their main complaints were presumptive symptoms of pregnancy such as vomiting, digestive problems, pain, and abdominal enlargement. After a complete examination, pregnancy was diagnosed in both women.[10] Nevertheless, our case had not experienced the symptoms of pregnancy and she referred with vaginal bleeding. This complication is the main clinical manifestation of threatened abortion. Vaginal bleeding develops in 20 to 25% of women during early gestation and may persist for days or weeks. However, the presumptive symptom is more common than vaginal bleeding during pregnancy.[12]

The end of reproductive years is characterized by the cessation of menstrual periods and is known as the frequency of anovulation cycles rose. Although pregnancy after menopause is very rare, it can lead to vaginal bleeding like pregnancy in reproductive years. Thus, when women refer to clinics or hospitals with complaints

of postmenopausal bleeding, the possibility of pregnancy should be included in the differential diagnosis by physicians or midwives.

Researchers have found small rises in most pregnancy-related and birth-related complications with maternal age. They have identified increases in the risk of gestational diabetes, dystocia, placenta previa, breech presentation, emergency cesarean delivery, postpartum hemorrhage, preterm birth, low birth weight, and macrosomia. Other researchers have found that the risk of maternal mortality increases with age.[13,14] The risk symptoms, attention to diet, personal hygiene, referring for prenatal care, taking iron supplementation, and hospital delivery should be emphasized for pregnant women with advanced age.[15]

Conclusion

In cases of postmenopausal bleeding, to rule out pregnancy, free beta-subunit HCG measurement should be conducted and if found to be elevated, followed by appropriate imaging tests. In the present study, the finding of postmenopausal pregnancy was quite accidentally, and the patient referred to the clinic with vaginal bleeding. The follow-up was continued until 34 weeks of gestation and was terminated with the birth of the child through cesarean section. It seems it is not impossible to resume ovarian activity in postmenopausal women following a stressful event or a metabolism disorder. Therefore, it is recommended that patients be asked not to have intercourse for 6 weeks after birth and then, refer for an Anti-Mullerian Hormone (AMH) test. A result within the range of 0.5–1 ng/mL in the AMH test illustrates a low ovarian reserve.[4] In the database searches, no data were found on the likelihood of recurrence of pregnancy after menopause. No texts, resources, and guidelines regarding the prediction of postmenopausal preconception education were found.

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Conflicts of interest

Nothing to declare.

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