Case Report

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A Rare Case Report: Atypical Endometrial Hyperplasia and Combination of Placental Site Nodule and Treatment Follow-up

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ABSTRACT

Placental site nodules are benign, non-neoplastic lesions, usually seen incidentally in the pathology results of curettage materials, cervical biopsies or hysterectomy materials of women of reproductive age. It originates from intermediate trophoblasts at the implantation site. Although it is a benign lesion, its histopathological distinction from trophoblastic and other malignant neoplasms is important. A 32-year-old female patient, who had given vaginal birth twice before and who had no history of abortion, consulted with the complaint of vaginal bleeding lasting for a month. In transvaginal ultrasonography, the endometrium was 17 mm, the irregularity and thickness increase. Beta human chorionic gonadotropin (β-hCG) test result was negative. Fractional curettage (F&C) was performed. It was reported as "Hyalinized stroma fragments (consistent with placental site nodule) showing atypical endometrial hyperplasia and trophoblastic cell proliferation". Primolut-N three times a day was prescribed. The patient wanted to keep her fertility the for continuing with medical treatment was decided. A new medicine, Megace 160 mg twice a day was prescribed. The control pathology result was reported as "Hyalinized stroma fragments showing trophoblastic cell proliferation (consistent with placental site nodule). The lesion in 4 focus, the largest of which was 2 mm and the others were 1 mm in diameter and showed P63 and PLAP positive staining with the applied immunohistochemical method. Ki67 proliferation index is 2-3%". Close follow-up was planned for the patient every 6 months. Our case report is the first in the literature in terms of the association of atypical endometrial hyperplasia and placental site nodule. In a female of reproductive age who presents with the complaint of excessive vaginal bleeding that does not follow pregnancy, β-hCG should be checked, previous pregnancy or miscarriage history should be questioned, in case of negative results, a benign lesion, a placental site nodule, should be included in the differential diagnosis.

Keywords: Placental site nodule, atypical endometrial hyperplasia, vaginal bleeding, fractional curettage, female

INTRODUCTION

Placental site nodule is included in the group of rare trophoblastic tissue proliferations in the classification of the World Health Organization and the International Society of Gynecological Pathologists.[1] Placental site nodules originate from small, well-circumscribed, nodular chorionic-type intermediate trophoblasts embedded in the hyalinized stroma.[2] Most of the cases are detected incidentally during curettage or biopsies and patients usually present with irregular uterine bleeding, recurrent spontaneous abortion, abnormal cervical smears, postcoital bleeding and rarely infertility. It is a benign lesion, but due to its histological appearance, it can be confused with malignant neoplasms such as trophoblastic and squamous cell carcinoma.[3]

CASE REPORT

A 32-year-old female patient with Gravidity 2 Parity 2, who had given vaginal birth twice before and who had no history of abortion, consulted to our obstetrics and gynecology clinic with the complaint of vaginal bleeding lasting for a month. The patient with a known diagnosis of Type 2 Diabetes Mellitus and using Glifor 850 mg 2x1 had no previous operation or history of smoking. There was no feature in the family history. On speculum examination, the collum was multiparous and bleeding. In transvaginal ultrasonography (TVUSG), the endometrium was 17 mm, the irregularity and thickness increase in the fundus part was evaluated in favor of endometrial polyp. Bilateral ovaries were normal. Complete blood count (CBC), coagulation, biochemistry, tumor markers, Beta human chorionic gonadotropin (β-hCG) were requested

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from the patient. The patient's CBC, biochemistry and tumor markers were within the normal range; β-hCG was negative. Pap smear was taken and the result was reported as "negative for intraepithelial lesion or malignancy". Fractional curettage (F&C) was performed. The pathology result was reported as "Hyalinized stroma fragments (consistent with placental site nodule) showing atypical endometrial hyperplasia and trophoblastic cell proliferation". As treatment patient given Primolut-N 3x1. Hysterectomy operation was offered, but patient wanted to keep her fertility the for continuing with medical treatment was decided. Megace 160 mg 2x1 treatment was started. The patient was called for monthly liver function tests control. The control F&C was planned after 5 months. The patient's results of liver function tests were within normal ranges. Pipelle endometrial sampling was taken from the patient because the endometrium was irregular in TVUSG. The pathology result was reported as "endometrium under the influence of gestagen". It was planned for the patient to continue on Megace 160 mg 2x1 treatment. The control F&C was performed after 4 months of treatment. The pathology result was reported as "Hyalinized stroma fragments showing trophoblastic cell proliferation (consistent with placental site nodule), shedding in the surrounding endometrium and irregular proliferation findings; The lesion was observed in 4 focus, the largest of which was 2 mm and the others were 1 mm in diameter. The lesion showed P63 and PLAP positive staining with the applied immunohistochemical method. Ki67 proliferation index is 2-3%" (Figure 1). Close follow-up was planned for the patient every 6 months. Our study is patient-approved and has patient consent.

DISCUSSION

Placental site nodules originate from small, well-circumscribed, nodular chorionic-type intermediate trophoblasts embedded in the hyalinized stroma.[2] Benign proliferation of intermediate trophoblasts is placental site nodule, and malignant proliferation is placental site trophoblastic tumor.[4] Today, information about placental site nodule is limited to a small number of case series and case reports. In these studies, it was generally shown to be associated with placental site tumor or placental site trophoblastic tumor.[2,4] However, the placental site nodule seen with atypical endometrial hyperplasia is presented as a case report for the first time in the literature. High β-hCG values are observed in placental site trophoblastic tumor and choriocarcinoma, and it is used under doctor's follow-up.[2] In our case, the β-hCG value was negative. It has helped to recognize this distinction. Immunohistochemically, low Ki67 index and PLAP positivity are also important findings in the differential diagnosis of placental site nodule.[2,3] In our case, P63 and PLAP showed positive staining. Ki67 proliferation index is 2-3%. In a study, 40% of placental site nodules were found in the endocervix and 56% in the endometrium. It has been reported that it is rarely observed in the fallopian tube due to a previous tubal pregnancy.[2,5,6] In most of the cases, there is a history of therapeutic abortion or cesarean section.[7] In our case, the difference from the other cases presented in the literature was that there was no history of therapeutic abortion or cesarean section.

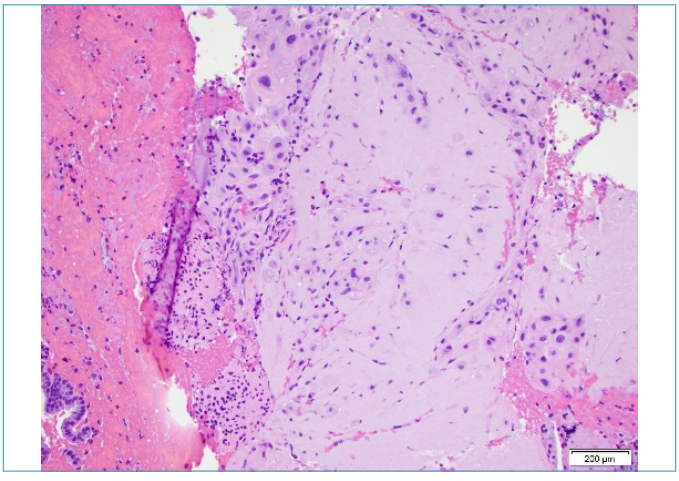

Figure 1. Placental site nodule pathology

Placental site nodule is usually seen after intrauterine pregnancies, although it has been reported that the interval can be as long as 1 month to 8 years, the average duration is 36 months.[1,8] Our case is included as a rare case report since last time the patient gave birth was 5 years ago.

Placental site nodules are benign, non-neoplastic lesions. In the study of Huettner and Gersell,[9] two recurrent placental site nodules occurred in the follow-ups of the patients, and no trophoblastic disease or gynecological malignancy development was detected in any of the patients. In our case, control F&C every 6 months after diagnosis, β-hCG follow-up and clinical follow-up were recommended.

CONCLUSION

Although our case report is the first in the literature in terms of the association of atypical endometrial hyperplasia and placental site nodule, it is among the rare cases in many respects.

In a female patient of reproductive age who presents with the complaint of excessive vaginal bleeding that does not follow pregnancy, β-hCG value should be checked, previous pregnancy or miscarriage history should be questioned, and in case of negative results, a benign lesion, a placental site nodule, should be included in the differential diagnosis.

Ethics

Informed Consent: Our study is patient-approved and has patient consent.

Authorship Contributions

Surgical and Medical Practices: A.G.Z., C.T, Concept: A.G.Z., C.T., Design: A.G.Z., C.T., Data Collection or Processing: A.G.Z., C.T., Analysis or Interpretation: A.G.Z., C.T., Literature Search: A.G.Z., C.T., Writing: A.G.Z., C.T.

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