

A case of placental polyp after normal vaginal delivery

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Placental polyp is retained placental tissue within the endometrial cavity, which forms a nidus for inflammation and bleeding. There are very few reported cases of the clinical placental polyp. Here, we report a case of 34-year-old G4L3Ab1 woman with the chief complaint of intermittent vaginal bleeding since her last normal vaginal delivery 3 months ago. Serum human chorionic gonadotropin (hCG) titer was slightly elevated. A polypoid mass was detected within the endometrial cavity by imaging studies. History of the patient, mass lesion within the endometrial cavity and slightly elevated serum hCG titer raised the suspicion of trophoblastic neoplasms. Endometrial curettage yielded unsatisfactory specimen containing only fibrin deposition and was followed by total hysterectomy. The uterus showed slight global enlargement resulting from the presence of a polypoid mass within the endometrial cavity. The red-colored mass had a smooth outer surface and fragile consistency without any permeation into the myometrium. Pathology reported it as the placental polyp. Although very rare, placental polyp should be kept in mind as one of the reasons of abnormal uterine bleeding in parous women. Definite diagnosis is made by pathology examination.

Key words: Normal vaginal delivery, placental polyp, uterine bleeding

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INTRODUCTION

Placental polyp is a somewhat pedunculated remnant of chorionic tissue retained in the uterine cavity for an indefinite time. It may result in abnormal uterine bleeding and slightly elevated detectable titers of serum β -human chorionic gonadotropin (hCG). These pedunculated masses of villi are often found within days to weeks following abortion or delivery of a term placenta. However, they rarely persist for months or even years after pregnancy.^[1] Since trophoblastic neoplasms especially placental site trophoblastic tumor may have similar symptoms and signs, it is important to consider placental polyp in differential diagnosis in such situations.

CASE REPORT

A 34-year-old G4L3Ab1 woman came with abnormal uterine bleeding since her last normal vaginal delivery 3 months ago. Serum β -hCG level was slightly elevated ranging from 86 to 103 μ IU/ml during diagnostic investigations. Ultrasonography revealed enlarged uterus with an echolucent intracavitary uterine mass measuring 73 mm \times 55 mm \times 24 mm. Computerized topography confirmed the presence of the mass and showed no abnormality in thorax. Clinical, laboratory,

and imaging findings raised the suspicion of gestational trophoblastic tumors especially those arising from intermediate trophoblastic cells.

Endometrial curettage yielded unsatisfactory specimen containing only fibrin deposition. Following unsatisfactory curettage, the patient underwent total hysterectomy. Macroscopically, the uterus showed slight global enlargement resulting from the presence of a polypoid mass within the endometrial cavity. The polypoid mass had a smooth outer surface and fragile consistency. The cut surface was diffusely red with some fine streaks of a gray colored tissue. It was attached to the uterine wall in the fundal region without any macroscopic permeation into the myometrium [Figure 1]. Microscopic study showed largely necrotic villi in a network of fibrin deposition [Figures 2 and 3]. Scattered viable villi still preserving their trophoblastic lining were found among the necrotic ones. Final diagnosis was placental polyp according to macroscopic and microscopic findings. Serum hCG fell rapidly to undetectable level following surgery. The patient has been well 4 months after hysterectomy.

DISCUSSION

Placental polyp is a fragment of retained placental tissue in the uterus that has undergone neovascularization

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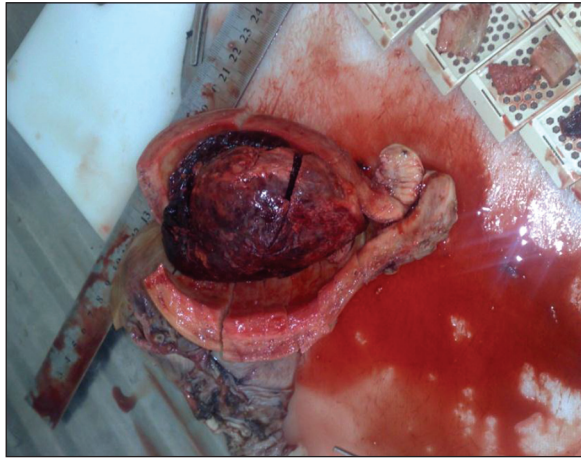


Figure 1: A large polypoid mass with smooth outer surface has completely filled the endometrial cavity

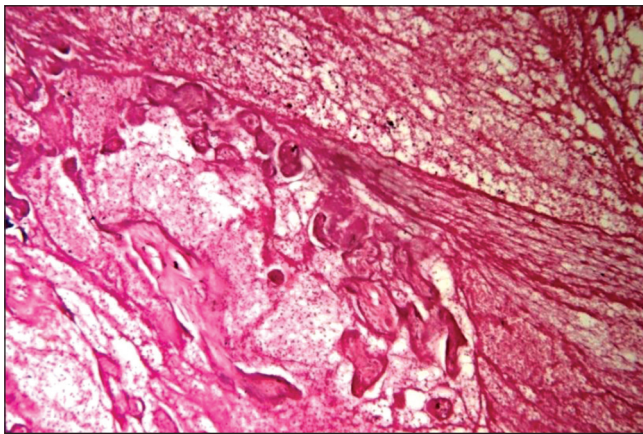


Figure 2: Necrotic chorionic villi are seen in the background of fibrin deposition (x40)

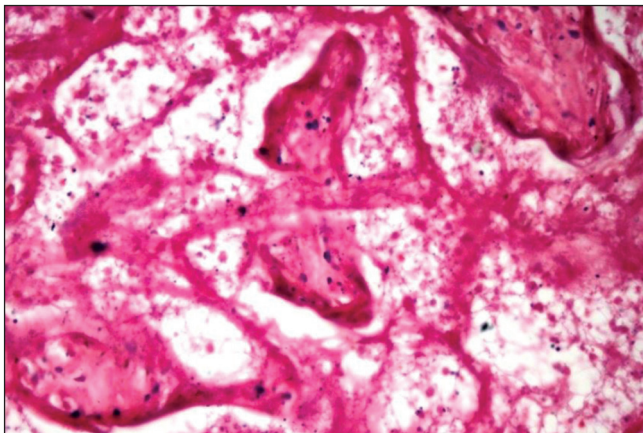


Figure 3: Nuclear debris are seen in the stroma of necrotic chorionic villi (x400)

after resolution of gestation. Most commonly, placental polyp occurs after therapeutic abortion and spontaneous delivery. It is extremely rare after spontaneous abortion. Abnormal vaginal bleeding after abortion or delivery may indicate the presence of placental polyp. The villi may be necrotic, hyalinized, or partially calcified. They form a nidus

for inflammation and bleeding.^[1] Chronic uterine inversion due to placental polyp has also been reported.^[2] A case of placental polyp has been seen to arise from exaggerated placental site.^[3]

These pedunculated masses of villi are often found within days to weeks following abortion or delivery of a term placenta. Rarely, they persist for months or even years after pregnancy.^[1]

Abnormal uterine bleeding due to placental polyp has been attributed to preserved villi, clusters of destructive villi, and isolated viable cotyledons. Preservation of the brush border of syncytiotrophoblastic cells and the presence of placental phosphatase maintain the anticoagulative properties of villi. Thromboplastic properties of the preserved villi play an important role in the pathogenesis of uterine bleeding when necrotic villi with epithelial remnants are prevalent.^[4]

Ultrasound with color Doppler imaging can diagnose placental polyp with abundant blood flow.^[5] Computed tomographic angiography is also useful in diagnosis and management of placental polyp with neovascularization.^[6] Magnetic resonance imaging may also be used in diagnosis and follow-up of placental polyps.^[7]

The most clinically significant placental polyp is the hypervascular type. A hypervascular placental polyp may lead to severe hemorrhage that requires blood transfusions, interventional radiology procedures, hysteroscopic resection, and even hysterectomy to control bleeding. Evaluation of neovascularization by multimodal imaging is potentially useful in management of placental polyp in women who wish to preserve fertility.

Successful treatment with the use of iliac artery occlusion catheters and concomitant hysteroscopic resection has been reported.^[8] Local injections of methotrexate have also been used in the treatment of placental polyp.^[7] Intraoperative injection of prostaglandin F2 α followed by hysteroscopic resection has been successful in management of these cases.^[9]

Our case has been treated with hysterectomy. Serum hCG fell to undetectable level following surgery. Although the patient had completed her family and did not have any desire to preserve her fertility, a proper preoperative diagnosis with accurate interpretation of imaging findings and satisfactory curettage would have prevented hysterectomy in this patient.

Placental polyp should be considered in any case of parous woman with unexplained abnormal uterine bleeding and

slightly elevated serum hCG level. The history of the last pregnancy is sometimes very remote. This does not exclude the possibility of the presence of a placental polyp as the source of abnormal bleeding.

AUTHORS' CONTRIBUTIONS

All authors have contributed in designing and preparation of the first draft of the manuscript. They have read and approved the content of the manuscript and confirmed the accuracy or integrity of any part of the work.

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