

Placental Polyp : A Rare Case Report

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Abstract

Placental polyp is the retained fragment of placental tissue which presents as a polypoidal or pedunculated mass within the uterus. It is a rare entity and has an incidence of less than 0.25 % of all pregnancies. There are also very few reported cases of the clinical placental polyp. Here, we report a case of 22-year-old P1 woman presenting with vaginal bleeding and something coming down into vagina. Her last pregnancy had occurred one year ago. Laboratory investigation revealed slightly elevated serum β -hCG. Ultrasonography revealed thick endometrium, broad cervix (5.2cm) and a hyperechoic mass within the cervix. Extraction of the placental polyp followed by endometrial curettage were done and tissue sent for histopathology. Definite diagnosis was made by histopathological examination and which was a placental polyp.

Key words: Normal vaginal delivery; Placental polyp; Uterine bleeding; Vagina.

INTRODUCTION

Placental polyp is the retained fragment of placental tissue after the parturition or abortion for indefinite period resulting in the formation of a polypoidal mass in the uterus¹. It is a rare entity and has an incidence of less than 0.25 % of all pregnancies².

Most commonly, placental polyps occur after therapeutic abortion and spontaneous delivery. It is extremely rare after spontaneous abortion³. 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 (β -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 pregnancy⁴.

Patients usually present with symptoms like heavy bleeding or dirty discharge per vaginam dating back to time of childbirth or miscarriage. Diagnosis is usually made by colour Doppler ultrasound⁵.

The best method to make the diagnosis and manage a placental polyp conservatively would be to do a diagnostic hysteroscopy and resect the polyp under vision and then confirm the diagnosis by histopathology⁶. Our case has been reported due to its rarity.

CASE REPORT

A 22-year-old P1 woman came with the complaint of irregular vaginal bleeding for two months and something coming down per vagina for one week. She had a normal vaginal delivery one year ago and there were no postpartum complications. She had normal menstrual history and irregular vaginal bleeding since her last normal period two months ago. A soft haemorrhagic mass protruding from the external os of the

cervix measuring approximately 4 cm x3 cm was seen on her vaginal examination. The uterus and both adnexa were normal. Clinically it was suspected to be choriocarcinoma. Serum β -hCG level was slightly elevated (102 mIU/ml) during diagnostic investigations. Ultrasonography revealed thick endometrium, broad cervix and a hyperechoic mass (Vol-16cc) within the cervix. X-Ray chest showed no abnormality. Clinical, laboratory and imaging findings raised the suspicion of gestational trophoblastic-tumours especially those arising from intermediate trophoblastic cells. Since trophoblastic neoplasm, especially placental site trophoblastic tumour may have similar symptoms and signs. It is important to consider placental polyp in differential diagnosis in such situation.

All investigations for pre-anaesthetic checkup were done. Then, examination under anaesthesia was performed and tissue was taken from the mass very cautiously for fear of torrential haemorrhage, but no significant haemorrhage occurred. Then, extraction of the placental polyp was done very slowly with sponge holding forceps. At first we tried to extract the mass as a whole but it was not possible, so extraction of the polyp in piece meal method followed by endometrial curettage was done and tissue was sent for histopathology. Here there were no significant haemorrhage during the whole procedure, that was the uncommon feature in our case. Histopathology report revealed and confirmed the diagnosis as the placental polyp. The post-operative period was uneventful and serum β -hCG was (1.1 mIU/ml) on the 7th post-operative day.



Figure 1: A soft pedunculated haemorrhagic mass protruding through external os



Figure 2 : Ultrasonographic findings: Thick endometrium (18.8 mm) Broad cervix and hyperechoic structure within i



Figure 3 : Placental polyp after extraction

DISCUSSION

The placental polyp is a rare entity and its estimated incidence is around 1 in 40,000 -60,000 deliveries. The clinical event could be life-threatening for the patient and sometimes may require an emergency hysterectomy. Profuse haemorrhage and hypovolemic shock are the most feared complications⁷. Remnants of placenta or membrane attached to the uterine wall and fibrin deposition around the remnants are usually considered pathognomonic of the formation of placental polyp⁸. In 1884 Baer reported a case of placental polyp that occurred 12 years after the pregnancy and this entity has been recognized since then⁹.

Placental polyps are of two types: the first type which occurs in the first four weeks after postparturition period is termed as acute and the other one which occurs months or years later is termed as chronic type¹⁰. Acute type of placental polyps are more common. A few cases were reported 5 years after attaining menopause, 20 years after delivery and even without documented pregnancy¹¹. Our case presented 1 year after her last pregnancy.

Most of the acute type of placental polyps present with postpartum haemorrhage and the chronic type presents with massive bleeding associated with pelvic pain. Few cases show a mass protruding from the external os¹². Our case presented a mass protruding from the external os.

Pathogenesis of the placental polyp has been explained by two major theories. According to the first theory the placenta is attached to the cornual or fundal myometria and is easily retained as the myometrium in this region is thin and atonic. Second theory suggests that the placenta accreta leads to the retention of placental tissue as the villi in this condition are directly attached to the underlying myometrium due to the defective decidua, especially in the cornual region. Hence the cornu or fundus becomes the most common sites for placental polyps¹³. But in our case, placental polyp protruding from external os, as a case of rare entity.

Other tumours of trophoblastic origin such as choriocarcinoma and placental site trophoblastic tumour also have similar gross appearance and elevated β -hCG level¹⁴.

Histologically, the placental polyp contains predominantly the ghost villi which are hyalinized, necrotic and without lining trophoblast. Some of the chorionic villi show a rim of syncytiotrophoblasts that were viable. The base of the placental polyp contains abundant decidualized stroma with dilated and congested blood vessels. The features favouring the diagnosis

of placental site trophoblastic tumour are nodules composed of intermediate trophoblastic cells arranged in cords, nests, irregular clusters or scattered within the eosinophilic hyalinized or fibrinoid matrix. The cells have irregular and lobated nuclei and amphophilic or clear cytoplasm. Villi are not seen in this condition¹³. In our case the diagnosis of choriocarcinoma was ruled out due to the presence of villi, absence of nuclear pleomorphism and low level of β -hCG.

Ultrasound with colour Doppler imaging can diagnose placental polyp with abundant blood flow⁷. MRI may also be used in diagnosis and follow up of placental polyps¹⁵. MRI and power Doppler imaging can more accurately detect abundant blood supply of the placental polyps rather than conventional colour signal USG¹⁶. imaging techniques help in planning further management of this condition. In our case, mass protruding through the external os, so clinical findings and serum β -hCG were more helpful in planning further management than imaging techniques. It was another rare entity of our case. Most of the cases are treated by hysterectomy due to uncontrolled bleeding which is unresponsive to medication or further exacerbation by dilatation and curettage. In some cases where the preservation of fertility is required, the placental polyps can be managed by conservative vaginal resection or hysteroscopic removal after the selective transarterial embolization or even by administration of the methotrexate instead of surgery^{17,18}. Our case has been treated with extraction of placental polyp followed by endometrial curettage without significant haemorrhage. Serum β -hCG fell to undetectable level following surgery.

CONCLUSION

Though placental polyp is a rare entity, it has similar clinical features as the other diseases. So, it should be considered in any case of parous woman with unexplained abnormal uterine bleeding and slightly elevated serum β -hCG level. The history of last pregnancy is sometimes very remote. This does not exclude the possibility of the placental polyp as the source of abnormal uterine bleeding. To preserve fertility and lessen morbidity in the cases of placental polyp, an optimal investigation and management with efficient planning is required.

DISCLOSURE

All the authors declared no competing interest.

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