

PLACENTAL POLYP: A RARITY- TREATED HYSTEROSCOPICALLY.

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Article Received on 20/05/2016

Article Revised on 10/06/2016

Article Accepted on 30/06/2016

ABSTRACT

A placental polyp is an intrauterine polypoid mass occurring from residual placental fragments following surgical abortion, cesarean section or vaginal delivery. They present with symptoms within days to weeks as abnormal uterine bleeding with slightly elevated detectable titers of serum β -human chorionic gonadotropin (β HCG). We present a case of 34 year old woman, P₀A₄ with history of spontaneous abortion at 6 weeks gestation for which she underwent dilatation and curettage. Following this she presented with complaints of heavy bleeding and dirty discharge per vaginum for 12 days. Ultrasonography revealed features of endometrial polyp with a small vascular pedicle and corpus luteum in left ovary. Based on her history and symptoms, the findings were correlated with serum β HCG which was 96.10 U/L. Diagnostic and operative hysteroscopy was done and polyp found in left cornua was resected. Histopathological examination showed features suggestive of products of conception. Her follow up β HCG was 0 U/L. Through this case the authors would like to stress the importance of hysteroscopy in diagnosis and management of placental polyp that can be missed on ultrasound and blind procedure like curettage.

KEYWORDS: β HCG, curettage, hysteroscopy, polyp, ultrasonography.

INTRODUCTION

Placental polyp is a polypoidal mass in the uterus formed by the aggregation of retained fragments of placental tissue after parturition or abortion for an indefinite period. It is predominantly composed of necrotic and hyalinized chorionic villi.

It is a rare entity and its estimated incidence is around 1 in 40,000-60,000 deliveries.^[1]

Most commonly, placental polyps occur after therapeutic abortion and spontaneous delivery. It is extremely rare after a spontaneous abortion.^[2]

Patients usually present with symptoms like heavy bleeding or dirty discharge per vaginum dating back to time of childbirth or miscarriage.

Diagnosis can be made by color doppler ultrasound, CT or MRI.^[3]

The best method to confirm 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 histopathological examination.

CASE REPORT

34 year old woman, P₀A₄ presented with complaints of heavy bleeding and dirty discharge per vaginum for 12 days. She had history of spontaneous abortion at 6 weeks gestation for which she underwent dilatation and curettage four days prior to the onset of her complaints.

On examination her vitals were stable, abdomen was soft, no tenderness and speculum examination revealed bleeding per vaginum.

Ultrasonography revealed features of endometrial polyp in the fundus towards left of midline measuring 22mm 15mm 8mm with a small vascular pedicle (figure: 1). Left ovary had a cyst of 12mm size with few internal echoes and low impedance peri-cystic color flow suggestive of corpus luteum (figure: 2).

Based on her history and symptoms, we suspected placental polyp and the findings were correlated with serum β HCG which was 96.10 U/L.



FIGURE 1: USG of polyp with vascular pedicle.



FIGURE 2: Left ovarian cyst with low impedance peri-cystic color flow

Diagnostic and operative hysteroscopy was done. Polyp of 2 × 2 cms was found in the left cornua in front of the ostium (figure: 3). Rest of the uterine cavity was normal.

Polypectomy was done and sent for histopathological examination.

Post-operative period was uneventful and she was discharged the following day.



FIGURE 3: Hysteroscopic view of placental polyp in the left cornua.

Histopathological examination showed features suggestive of products of conception with necrotic villi and decidua (figure: 4).

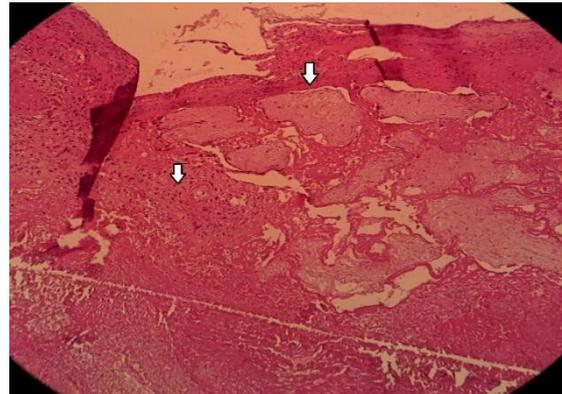


FIGURE 4: Histopathology showing necrotic villi and decidua.

On follow up β HCG was 0 U/L and she was relieved of her symptoms.

DISCUSSION

Placental polyp is a rare pathology encountered in day to day practice with an incidence of less than 0.25% of all pregnancies.^[4] Hence is not thought of as the first possible diagnosis when a patient presents with bleeding per vaginum.

The first case of placental polyp was reported by Baer in 1884.^[5]

Placental polyps are of two types. Acute type which occurs in the first four weeks after parturition and the one which occurs months or years later is termed as chronic type. Acute type of placental polyps are more common.^[6,7]

A placental polyp is an intrauterine polypoid mass occurring due to organization of the residual placental fragments following surgical abortion, Cesarean section, or vaginal delivery.^[8]

It slows down postnatal involution of uterus and contributes to development of endometritis and metrorrhagia. It enlarges in size due to accumulation of blood clots and fibrin products over several weeks to several months after delivery.

Pathogenesis of the placental polyps has been explained by two major theories.

According to theory by Ranney, the fundal and uterotubal areas have reduced muscle mass and are relatively atonic after second stage of labor which explains the phenomenon of retained placenta. In his study, out of 1500 deliveries, he reported 62 cases of retained placenta of which 45 (72.6%) were implanted in cornual region.^[9]

According to the theory by Eastman and Hellman in 1966, the placenta is sometimes attached to the cornual or fundal myometrium and is easily retained as the myometrium in this region is thin and atonic and the chorionic villi attach themselves directly to the underlying myometrium as a result of defective decidua.^[10]

Hence the cornua or fundus becomes the most common sites for the placental polyps.

In our patient the placental polyp was seen in the left cornual region.

Diagnosis is provisionally made pre operatively from a typical history, serum β HCG and imaging.

Patients usually give a typical history of miscarriage with history of curettage or recent history of delivery, followed by heavy bleeding per vaginum.

The factors responsible for the survival of these villi are still not clear however these surviving villi are responsible for the production of the human chorionic gonadotrophin (HCG) which was elevated in our case.^[11, 12]

The diagnosis is also made using imaging modalities like USG with color Doppler signal, magnetic resonance imaging (MRI) and computed tomographic angiography.

USG imaging with colour doppler of the placental polyp shows a heterogenous polypoid mass with prominent vascular flow.

Koichi Hiraki et al in 2014 also concluded that Use of color Doppler ultrasound may be useful in diagnosing placental polyp.^[13]

MRI can more accurately detect the abundant blood supply of placental polyps and useful for follow-up.^[14]

Computed tomographic angiography is also useful in diagnosis and management of placental polyp with neovascularization.^[15]

Recently, there are some reports indicating that 3-D computed tomography angiography can be useful in diagnosing placental polyps and in determining a treatment plan.^[16]

American Society for Reproductive Medicine in 2009 concluded that 'Evaluation of neovascularization by multimodal imaging is potentially useful in the management of placental polyp in a woman who wishes to preserve fertility'.

Though there is availability of serum marker and imaging modalities, the preoperative diagnosis of placental polyp is rarely made.

Management

This clinical event could be life-threatening for the patient and sometimes may require an emergency hysterectomy.

Most patients are of reproductive age group and conservative treatment must be preferred.

Management has traditionally been dilatation and curettage, often guided by sonography. However, in these patients, tissue is usually attached to a small area of the endometrium and tissue evacuation is incomplete, thus bleeding or symptoms may persist.

Using hysteroscopy, this area can be selectively targeted and removed, without damaging the intact endometrium. Jimenez JS et al in 2008 in their study concluded that diagnostic-operative ambulatory hysteroscopy is a suitable alternative to blind curettage in the management of retained trophoblastic tissue. This technique can be performed in the office without anesthesia and with a low rate of complications.^[17]

Histologically, the placental polyp contains predominantly the ghost villi which are hyalinized and necrotic and without lining trophoblast. Some of the chorionic villi may show a rim of syncytiotrophoblasts which is the confirmatory diagnosis.

CONCLUSION

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.

Although sonography shows a placental polyp, it is not helpful in differentiating the polyps from other masses in the uterus such as hydatidiform moles or degenerated submucosal uterine leiomyomas. To preserve fertility and lessen morbidity in the cases of placental polyp, an optimal investigation and management with efficient planning is required. Hysteroscopic resection of placental polyp is an effective minimally invasive procedure to conservatively treat the pathology with minimal complications. Histopathological examination of tissue is required to confirm diagnosis.

DECLARATIONS

Funding: nil.

Conflict of interest: nil.

ACKNOWLEDGEMENT

I express my sincere gratitude to Dr. Rahul Manchanda, (HOD, Manchanda's Endoscopic Centre) whose guidance and suggestions have contributed immensely to the evolution of ideas on this subject. I am also thankful to my co-fellows (Manchanda's Endoscopic Centre),

husband (Dr. Gopalakrishnan) and my family for their input, suggestions and constant support.

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