

## **Case Report**

# **A Rare Cause of Secondary Postpartum Haemorrhage: Hyperactive Placental Site**

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**Abstract:** A 26 years old woman para3 living3 presented to gynae emergency in haemorrhagic shock (secondary postpartum haemorrhage) with severe anaemia on post natal day 10 of normal vaginal delivery at home. There was history of previous one caesarian section done 5 years back followed by a full term normal vaginal delivery 3 years back and myomectomy done 1 year back. Patient was managed conservatively. She was anaemic. Rest of the routine investigations were within normal limits. Coagulation profile and  $\beta$ HCG were also normal. After correction of anaemia she was discharged after 5 days. Patient was admitted again after one day in v/o similar complaints and bleeding was profuse. This time Balloon tamponade was done and bleeding stopped. She continued to be anaemic. USG Doppler was done which was normal. During her stay in hospital, she had a 3<sup>rd</sup> bout of bleeding after a gap of 4 days. Patient was counselled and advised to undergo hysterectomy in view of repeated bleeding resulting in to severe anaemia. Total Abdominal Hysterectomy was done with written informed consent after arranging adequate blood. Postoperative period was uneventful. The intraoperative findings were (a) uterus 8 weeks size, smooth in outline without any rent (b) No haemoperitoneum seen (c) B/L tubes and ovaries normal. On cut section, an irregular mass of around 2x2 cm was seen arising from the posterior wall of the uterus. Histopathology showed features suggestive of syncytial endometritis/hyperactive placental site. During follow up till date, patient is doing fine. In conclusion, hyperactive placental site is a self-limited condition which can result secondary to the retained products of conception like trophoblastic cells of mature placenta but it can be a cause of bleeding in a young female resulting in hysterectomy. Occurrence of this condition is also a rare finding.

**Keywords:** haemorrhagic, myomectomy, Histopathology.

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## **INTRODUCTION**

Hyperactive placental site or exaggerated placental site (EPS) is classified as a non-neoplastic trophoblastic lesion, and histologically it consists of endometrial and myometrial invasion of intermediate trophoblasts and syncytiotrophoblasts and it differs morphologically from placental site trophoblastic tumors and placental nodules [1]. Hyperactive placental site (syncytial endometritis) is regarded as a benign pseudotumor [2]. Often it is misinterpreted as a choriocarcinoma. The symptoms and signs are irregular vaginal bleeding, persistent subinvolution of the uterus, and a mildly elevated plasma level of human chorionic gonadotropin [3].

## **CASE REPORT**

A 26 years old women para3 living 3 with post natal day 10 of normal vaginal delivery at home was referred to safdarjung hospital in a state of haemorrhagic shock (secondary Post Partum Haemorrhage) with severe

anaemia. Before she went to some private hospital with BPV, D & E was done on the same day.

She was having bleeding from 2 days with soakage of 1-2 pads per day but the bleeding had increased since 3 hours with soakage of 4-5 pads in 3 hours. Patient was managed conservatively and bleeding stopped. She received 4 units of blood transfusion for correction of anaemia. All the investigations were normal except she was anaemic. Coagulation profile and  $\beta$ HCG were also normal. USG was done which was normal. She was discharged after 5 days.

Patient was readmitted one day later in v/o similar complaints of profuse vaginal bleeding. Balloon tamponade was done and bleeding stopped. Two units of blood transfused. Tamponade was removed after 24 hrs. USG Doppler was done which was normal grossly with increased vasularity. Chest X ray was WNL. Her obstetrics history was 5 years back a full term lower segment caesarian section, 3 years back a full term

normal vaginal delivery at home, and 15 days back a FTNVD at home. She was having a history of myomectomy done 1 year back.

Patient suffered from one more episode of bleeding on 18/7/12 with a passage of 800-1000 ml of blood. Decision of laparotomy was taken with consent of hysterectomy after arranging adequate blood. TAH was

done. The intraoperative findings were (a) uterus 8 weeks size, smooth in outline without any rent, (b) No haemoperitoneum seen, (c) B/L tubes and ovaries normal. On cut section, an irregular mass of around 2×2 cm was seen arising from the posterior wall of the uterus.

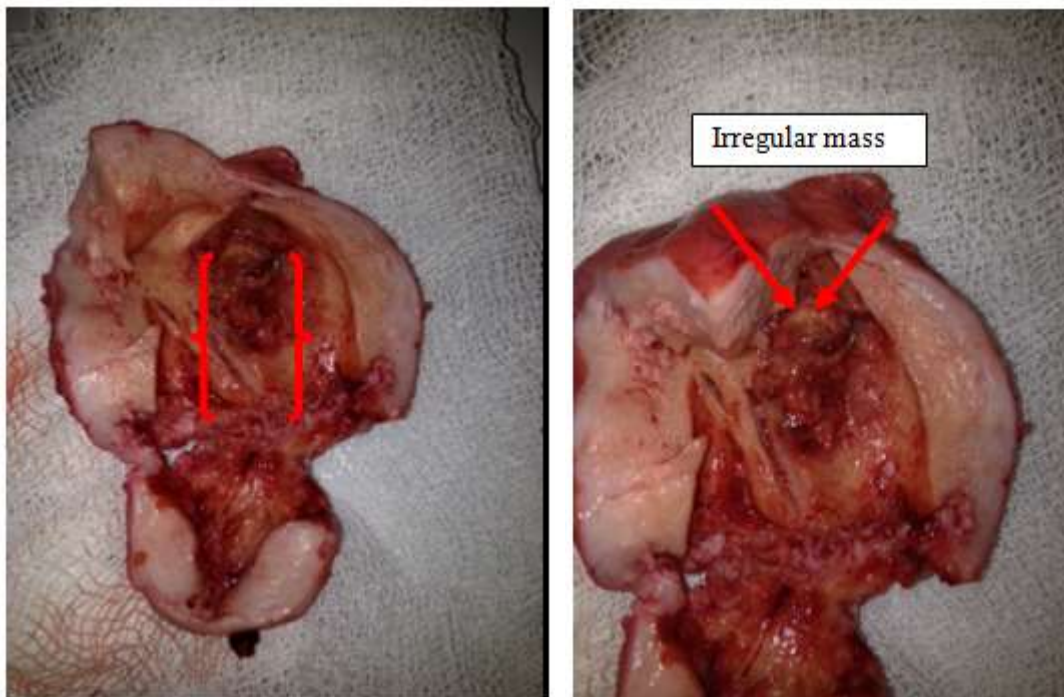


Fig. 1: Irregular mass

Histopathology shows non secretory endometrium, hyalinised membrane with dilated and congested blood vessels present. Membrane are showing adherent

trophoblastic cells invading the uterine wall. Features are suggestive of syncytial endometritis or hyperactive placental site.

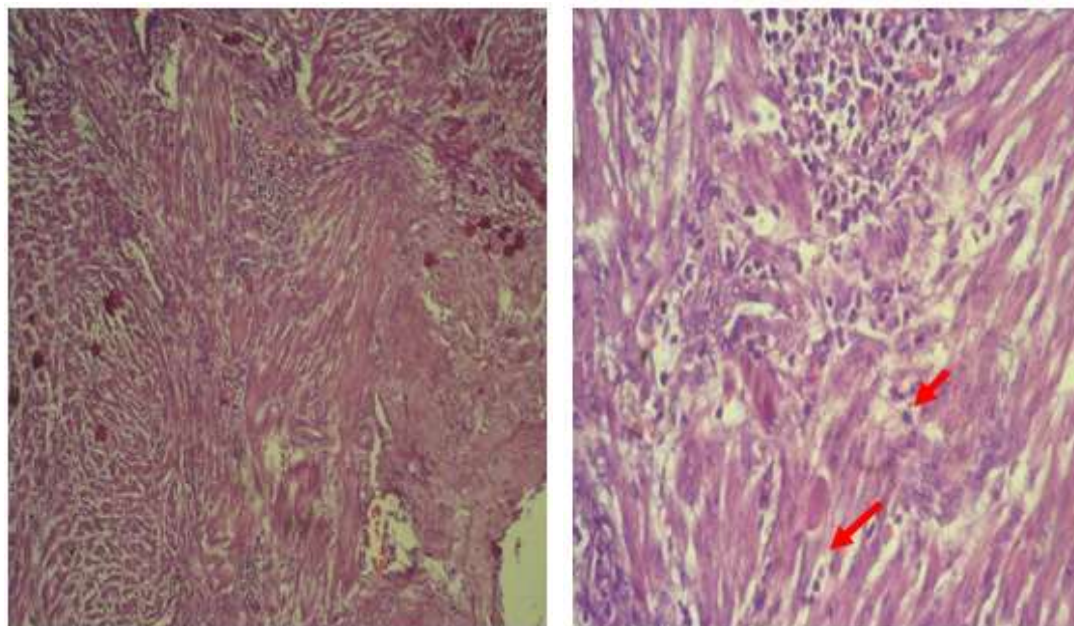


Fig. 2: Histopathology (Arrow- trophoblastic cells invading myometrium)

On follow up, Till date patient is doing fine.

## DISCUSSION

Hyperactive placental site or EPS is a term suggests a pathological basis for a physiological process in which isolated fetal trophoblast cells invade the maternal deciduas [4].

It represents an exaggeration of the normal reaction at the placental site, with proliferation of intermediate trophoblasts in both endometrium and superficial myometrium, and occasional deep invasion of the myometrium.

Histopathology examination of a biopsy taken during a caesarean section from a polypoid well shaped smooth lesion, about 3 cm in diameter on the anterior wall of the uterus apart from the placenta revealed an exuberant proliferation of trophoblastic cells in the placental site, a low Ki-67 labelling index and the absence of mitotic activity. [5].

An EPS can occur in a normal pregnancy or an abortion from the first trimester. It present in the form of placental polyp or can mimic choriocarcinoma. Color Doppler ultrasonography detected a pulsatile blood flow from the uterine wall into the mass and magnetic resonance imaging (MRI) showed tumor attached to the anterior wall of uterine corpus [6]. In our case ultrasonography only detected increased blood flow which could be present in any case in postpartum period. Our patient could not afford to get an MRI done.

Clinically choriocarcinoma was suspected in a 40 year old woman with three month amenorrhea along with abdominal pain & bleeding per vaginum. Patient was having previous history of two abortions. Her  $\beta$  HCG was 15855 IU/ml. Total abdominal hysterectomy was done in V/O choriocarcinoma. Due to lack of dimorphic population of trophoblastic cells, hemorrhagic necrosis, high mitotic index and invasiveness of carcinoma diagnosis of Exaggerated placental site was made post operatively [7].

To our knowledge, no one has reported sonographic findings of hyperactive placental site (syncytial endometritis). It is a diagnosis on histopathology. But it should be differentiated from placental site trophoblastic tumour.

Uterine artery embolization or hysteroscopic ablation could have some potential in management of such

patients. This would hold true specially for young patients where conservation of uterus is essential for future child bearing

## CONCLUSION

Hyperactive placental site is a self-limited condition which can result secondary to the retained products of conception like trophoblastic cells of mature placenta, but it can be a cause of bleeding in a young female resulting in hysterectomy. Occurrence of this condition is also a rare finding. Distinguishing EPS reaction from the other intermediate trophoblastic tumours is critical, as the latter may likely involve surgical intervention and/or chemotherapy, although no specific treatment and follow-up is required for EPS reaction. It is necessary to be aware of this pathology and take biopsies from suspicious lesions in the placental site for pathologic examination. The purpose of this report is to increase physicians' awareness of this lesion.

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