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KEY WORDS: Placenta increta, Placenta accreta, Placenta accrete spectrum, Uterine artery embolization, Emergency hysterectomy.

A RARE PLACENTAL ABNORMALITY IN PRIMIGRAVIDA

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ABSTRACT

INTRODUCTION: Placenta increta is a component of placenta accrete spectrum. It is one of the leading causes of emergency hysterectomy.The exact pathogenesis of the condition is unknown.

CASE SCENARIO: Primigravida with 28 weeks gestation referred to NRI hospital in view of preterm premature rupture of membranes. After investigating, patient was induced and foetus was delivered but placenta was not expelled spontaneously even after 2hrs. USG revealed placenta accreta. Cord knot was applied along with injection methotrexate 50mg IM was given for conservative management. There was fall in haemoglobin level with foul smelling vaginal discharge associated with fever for which blood transfusions and higher antibiotics were started. Bilateral uterine artery embolization was done, even then patient's condition deteriorated and was taken up for manual removal of placenta under GA. As manual removal was not successful, hysterotomy was done and placenta was removed completely. As there was minimal bleeding, hysterectomy was not done.

DISCUSSION: Placenta increta is extremely rareform in which there is penetration of villi into uterine musculature. In accreta, placenta is directly anchored to myometrium and in percreta, placenta penetrate upto serosal layer.

CONCLUSION: Placenta increta is a rare condition to occur in non scared uterus. By proper investigations such as USG, MRI; placental abnormalities can be ruled out in high risk patients.

INTRODUCTION:

Placenta accrete spectrum (PAS), formerly known as morbidly adherent placenta, refers to abnormally implanted, invasive, adhered placenta [1]. It includes placenta accreta, placenta increta and placenta percreta. The incidence is 3/1000 deliveries [2].

CASE SCENARIO:

24 year primigravida with 28weeks pregnancy referred to NRI general hospital with rupture of amniotic membranes since 3 hrs.

On examination: pallor and pedal edema present;
Per abdomen: uterus 24 weeks with breech presentation;
Per speculum: clear amniotic fluid leak present;
Per vaginum: cervix soft, posterior, minimally effaced; os 1cm dilated; presenting part breech at -2 station.

Blood investigations were within normal limits. TIFFA scan done in another hospital showed single live foetus of 20^{+4}weeks with severe oligohydramnios (almost absent) with Tetrology of fallot with 2mm echogenic foci in left ventricle.

In view of absent liquor and anomalous fetus, the patient was induced with one dose of misoprostol 100mcg tablet sublingually and delivered by spontaneous breech but placenta was not expelled spontaneously. Active management of third stage of labour was done. Following that, as the placenta was still not expelled, 10 units of oxytocin diluted in 20ml saline was injected into umbilical cord near to vulva and also manual removal tried but not successful.

USG revealed placenta accreta. Cord knot was tied with sterile silk near vulva. B-HCG: 1393mIU/ml, Inj.Methotrexate 50mg IM was given as conservative management. Prophylactic antibiotics started.

2 days later there was foul smelling vaginal discharge associated with fever and bleeding per vagina leading to fall in haemoglobin(7.6g/dl) level for which blood transfusions and higher antibiotics were started. MRI showed placenta increta.

Bilateral uterine artery embolization was done and was not successful in controlling bleeding. Subsequently planned for hysterotomy/hysterectomy. Before proceeding to laparotomy manual removal of placenta was tried but was not successful. Complete removal of placenta was done during hysterotomy with minimal bleeding. Post-op B-HCG: <1mIU/ml one week later. Histopathology report showed placenta increta with focal placental infarcts. Post-operative period was uneventful.

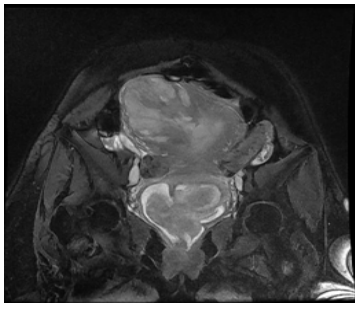

Fig.1: MRI: Placenta increta

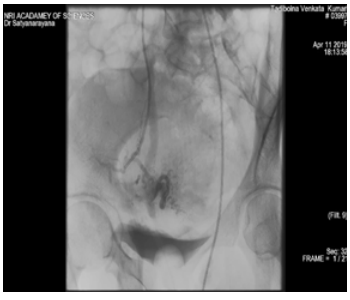

Fig.2: uterine artery before embolization

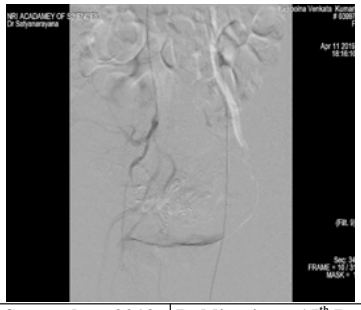

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Fig.3: uterine artery after embolization

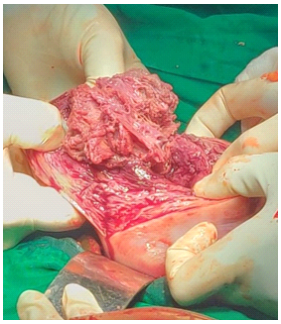

Fig. 4: uterus with placenta in-situ

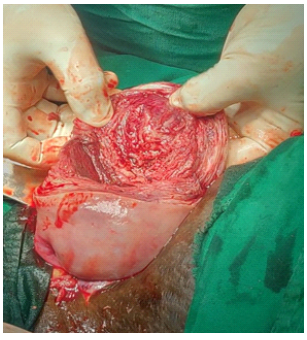

Fig. 5: placental bed after removing retained bits

DISCUSSION:

Placenta increta is an extremely rare form in which there is penetration of villi into uterine musculature. In accreta, placenta is directly anchored to myometrium and in percreta, upto serosal layer. PAS have also been reported in women with no previous pregnancies and no obvious uterine pathologies [3]. However, these cases are extremely rare.

The most important risk factors are placenta previa and prior caesarean delivery. Rate of PAS in placenta previa without prior caesarean section is 3% [4]. Any primary uterine anomaly or secondary damage to the uterine wall can lead to PAS. Other risk factors are endometrial curettage, manual removal of the placenta, postpartum endometritis, hysteroscopic surgery and uterine artery embolization. It may also be seen in uterine pathology; with no prior uterine surgery such as bicornuate uterus, adenomyosis, submucosal fibroids and myotonic dystrophy. This suggests that PAS is not always secondary to major uterine surgery[5][6].HPE is gold standard for diagnosis of PAS.

PAS is associated with signicant maternal morbidity and mortality and is one of the leading cause of haemorrhage and emergency hysterectomy. In conservative or expectant management, when fertility is desired; the cord is ligated near the placenta and left in-situ. Adjuvant measures like uterine artery embolization or ligation and post-delivery methotrexate administration and hysteroscopic resection are used to decrease blood loss, hasten placental reabsorption or both.

CONCLUSION:

PAS is rare in primigravida with non-scared uterus. Conservative management or expectant management should be considered only for carefully selected cases after detailed counselling about the risks, uncertain benefits, efficacy and availability of resources for emergency surgery.

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