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INTRALIGAMENTARY PREGNANCY:A RARE OCCURRENCE

Gynaecology

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ABSTRACT

Ectopic pregnancy continues to be an obstetric challenge despite the advancement of technology .Pregnancy in the broad ligament (also called Intraligamentary Pregnancy) is a rare form of ectopic pregnancy with a high risk of maternal mortality of 20%.Ultrasound may help in early diagnosis but mostly the diagnosis is established during surgery. Here we are presenting a case of ruptured left sided broad ligament pregnancy.

KEYWORDS

Broad ligament pregnancy ,hemoperitoneum ,laparotomy, ,sterilization failure.

INTRODUCTION: Abdominal pregnancies account for 1%of all ectopic pregnancies.[1]. It can be primary(rare) or secondary (common). It can occur in any part of the abdomen but is common in pouch of douglas and is rare in broad ligament. A broad ligament pregnancy usually results from trophoblastic penetration of tubal pregnancy through the tubal serosa and into the mesosalpinx with the secondary implantation between the leaves of broad ligament .It presents as an acute emergency during pregnancy and the diagnosis is commonly achieved during surgical exploration though ultrasonography may at times suggest this possibility if there is high index of suspicion

CASE REPORT: A 45 yrs post tubectomised patient presented to our obstetric emergency with history of 3 months amenorrhoea with abdominal pain and vaginal bleeding for 15 days.She was G6P4+1.She had 3 normal vaginal deliveries after which she underwent sterilization operation in a mass camp in which bilateral tubectomy operation was done by modified Pomeroy's technique.This was the third conception after the sterilization operation ,the first resulting in a full term vaginal delivery, the second in a 24 weeks IUD delivered vaginally.Since the patient was illiterate and belonging to rural area she didn' t seek medical help for termination of pregnancy in either of these 3 pregnancies nor for second sterilization operation .She had no other past medical or surgical history .She had severe pallor..Her pulse was 124/min and BP was 100/60 mm Hg .Abdomen was distended and tender. Abdominal guarding and rigidity was present. On vaginal examination, slight bleeding was present .Uterus was of normal size and anteverted .A tender mass was felt separate from uterus through the left fornix. Hb was 3 gm%. Her pregnancy test was positive. Ultrasonography revealed normal sized empty uterus and mass of size 7cmx8cm was seen in the left adnexa with hemoperitoneum. A provisional diagnosis of ruptured ectopic pregnancy was made and emergency laparotomy done. There was hemoperitoneum of ~ 1L suctioned out and 1 kidney tray of clots removed from the peritoneal cavity .A 12 week size fetus was lying freely in the peritoneal cavity.There was a well circumscribed mass adjacent to the left side of uterus of size 8cmx8cmx6cm in between the two layers of broad ligament and having a rent on the anterosuperior surface. Left ovary was normal looking but densely adherent to the mass .The left fallopian tube was present in two parts ,the medial 2-3 cm and the lateral fimbrial part which was adherent to the mass superiorly,the middle part was missing depicting previous sterilization operation by modified Pomeroy 's technique.The placenta was still inside the mass. The mass was excised and sent for HPE. Right side ovary was normal and the two stumps of right fallopian tube were far apart .Peritoneal lavage was done .Intraperitoneal drain given which was removed after 24 hrs.5 units of blood transfusion given .Postoperative period was uneventful. Patient was discharged on 6th postoperative day.

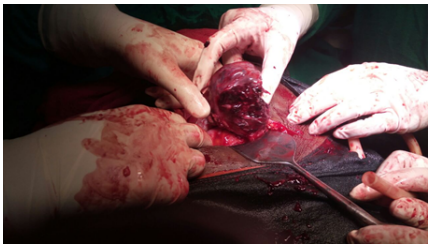

Fig 1 showing a well circumscribed mass with a rent on anterosuperior surface

Fig 2 showing uterus ,normal ovary on right side ,the two stumps of fallopian tube on right side {showing sterilization operation} and the ectopic sac on left side.

Note: The medial and the fimbrial stump of left side are above the sac.

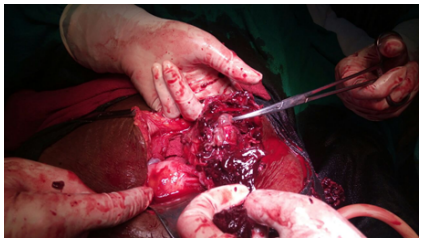

Fig 3 showing the 12 weeks fetus

DISCUSSION : Primary implantation of the fertilised ovum on the peritoneum is so rare that its existence is questionable. Abdominal pregnancy is almost always secondary ,the primary sites being tube, ovary or even the uterus------the conceptus escapes out through the

rent in the uterus.[2] Secondary abdominal pregnancy occurs in ovary, pouch of douglas, omentum ,pelvic sidewalls ,broad ligament, spleen, bowel ,liver, diaphragm and the serosa of the uterus.

Broad ligament pregnancy was first reported by Loschge in 1816.[3]It is a rare type of abdominal pregnancy which develops between the two layers of broad ligament.[4], [5], [6]

The clinical presentation of broad ligament ectopic pregnancy is highly variable and can range from asymptomatic early ectopic pregnancy to rupture in labour at term.Dull lower abdominal pain during early gestation is common .This has been attributed to the placental separation ,tearing of broad ligament and small peritoneal hemorrhage.[7], [8]

USG is the investigation of choice for diagnosis.MRI provides additional information for evaluating the extent of uterine and mesenteric involvement. [9] Still Broad ligament pregnancy is difficult to diagnose on imaging .It has been described in literature that if there is no intrauterine pregnancy on USG and the ectopic sac is beside the lower part of the uterus ,a strong suspicion of broad ligament ectopic pregnancy should be considered.[10]

Champion et al explained the anatomical relationship for diagnosis of broad ligament ectopic pregnancy. These are (1) Uterus located medial to the ectopic pregnancy.(2)The pelvic sidewalls located laterally.(3)The pelvic floor located inferiorly.(4)The fallopian tube located superiorly.[11]

The management ia exploratory laparotomy .However stable patients with early gestation can be considered for laparoscopic removal for small broad ligament pregnancies.[12] Conservative management or medical management is not recommended for broad ligament ectopic if the diagnosis is uncertain.

The overall failure rate in tubal sterilization is about 0.7%, the Pomeroy 's technique being the lowest 0.1-0.5% in the Pomeroy's technique .There is 15-50% chance of being ectopic if pregnancy occurs. Failure may be due to fistula formation or due to spontaneous reanastomosis.[13]The failure rates are much higher in inexperienced hands and in a camp set up,more so if the clients are not properly selected or if the operations are performed too hurriedly[14]..In our case,the patient conceived thrice after sterilization operation ,the first two pregnancy being intrauterine and the third being broad ligament ectopic.

CONCLUSION : This case of broad ligament ectopic pregnancy has been reported here not only because it is a rare type but also its diagnosis is a challenge .High index of clinical suspicion ,early diagnosis and emergency surgery is the key to management. Broad ligament ectopic pregnancy is more commonly associated with underlying risk factors like tubal surgery .The old saying “in a reproductive age group lady with atypical amenorrhoea,pain and vaginal bleeding, think of ectopic pregnancy” still holds good.

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