CASE REPORT

ANGULAR PREGNANCY: AN ECCENTRIC IMPLANTATION WITHIN UTERINE CAVITY

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Angular ectopic is a rare form of ectopic pregnancy which is diagnosed as intrauterine pregnancy on ultrasound but may rupture in second trimester leading to maternal mortality. We present a case of a 32-year-old primigravida who presented at 18 weeks gestation to the emergency department of national hospital Lahore with complaint of dizziness, sweating and epigastric pain for one hour. She had an episode of diarrhoea and vomiting at hospital followed by rapidly increased abdominal distension and signs of hypovolemic shock. Urgent ultrasound suggested rupture of posterior uterine wall and massive hemoperitoneum. An urgent laparotomy was done. Uterus was perforated by pregnancy posteriorly. baby was inside the sac and alive. But died soon after birth. Uterus was repaired in two layers. Stepwise devascularization of uterus was done due to continuous bleeding. 6 units whole blood 6 FFP were transfused. The abnormal location of this pregnancy makes it antenatal diagnosis difficult. A high index of suspicion is needed in pregnant women presenting in shock even when intrauterine location of pregnancy is diagnosed in first trimester.

Keywords: Pregnancy; Angular; Pregnancy Trimester; Second Pregnancy; Ectopic; Shock

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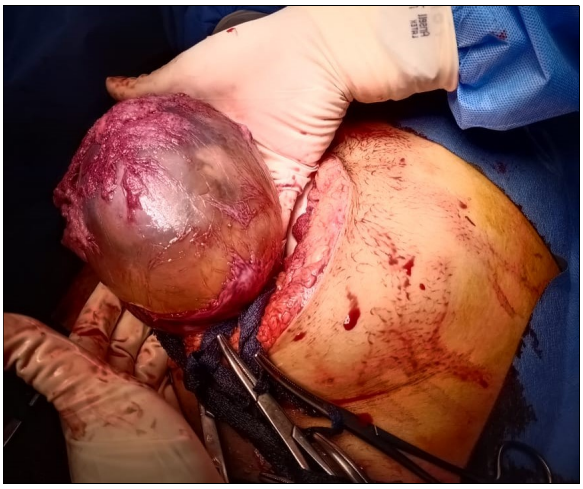
INTRODUCTION

Angular pregnancy is an eccentrically located pregnancy within the uterine cavity. It is medial to the utero-tubal junction and round ligament. It causes asymmetric enlargement of the uterus. The prognosis is variable with high risk of miscarriage, rupture of uterus with life threatening haemorrhage (28%) and live birth rate varying between 25–69%.[1]

It is rarely reported in literature due to lack of diagnosis on ultrasound. Radiologist often report these pregnancies as intrauterine. This is because the textbooks do not describe an eccentric pregnancy in the uterine cavity differently from normal intrauterine pregnancy even though it's been reported since long in the research. It is very important to identify these pregnancies so that a proper management plan is outlined and maternal complications can be avoided.[2]

CASE REPORT

A 32-year-old primigravida presented at 18 weeks gestation to the emergency department of National Hospital Lahore. She had complaint of dizziness, sweating and epigastric pain for one hour. She had an episode of diarrhoea and vomiting at hospital followed by rapidly increased abdominal distension and signs of hypovolemic shock. Urgent ultrasound showed a live foetus of 18 weeks within uterus however myometrium seemed extremely thinned out on right postero-lateral aspect of uterus. There was large amount of free fluid in peritoneal cavity suggesting hemoperitoneum. It was a confusing clinical situation as there was no history of trauma, the foetus was alive and intra peritoneal bleed was massive. An urgent laparotomy was done. Uterus was seen asymmetrically enlarged and right angle of uterus was bulging. Uterus was perforated by pregnancy posteriorly; myometrium was thinned out and seemed deficient. Foetus was inside the sac and alive but died soon after birth. Uterus was repaired in two layers compression sutures were applied. Stepwise devascularization of uterus was done in which first the right uterine artery and then the right utero-ovarian artery was ligated due to continuous bleeding. 6 units whole blood and 6 units fresh frozen plasma were transfused.



DISCUSSION

Angular pregnancy is an eccentrically located pregnancy within the uterine cavity. It is medial to the utero-tubal junction and round ligament.

Textbooks have long abandoned using this term as it is believed that these pregnancies run a normal course till term like intra uterine pregnancies.[3] It is surrounded by endometrium unlike interstitial pregnancy which is surrounded by myometrium.

While the interstitial pregnancy ruptures by 12–16 weeks, angular pregnancy may continue to grow towards the uterine cavity and reach term.[3] Endovaginal ultrasound and MRI are two modalities which diagnose these pregnancies. If diagnosed, the most appropriate management is to follow up with regular scans to see the direction of growth of these pregnancies. These can end up in spontaneous miscarriage, uterine rupture, term delivery, retained placenta.[2–4] Obstetricians from Iran have reported a similar case where mother's life was saved by urgent laparotomy due to strong index of suspicion.[5]

Surgically, the angular pregnancy is differentiated from interstitial pregnancy by determining the relationship of round ligament with the bulge of the ectopic pregnancy. The angular pregnancy causes round ligament to be pushed outward and forward whereas the interstitial pregnancy forms a bulge lateral to round ligament.[6]

Radiological proposed criteria to diagnoses eccentric pregnancies involves Implantation of gestational sac at lateral angle of the uterine cavity, medial to the uterotubal junction with ≤1 cm of myometrial thickness surrounding the gestational sac.[7]

So, we conclude that standardized definition and radiological diagnostic criteria be used to describe the eccentric pregnancies. This should be documented on first trimester endovaginal scans and followed up for growth to avoid risk of uterine rupture and other complications which can lead to maternal morbidity and mortality.

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