HETEROPIC PREGANACY: A RARE CONDITION

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Introduction

Heteropic pregnancy is defined as simultaneous coexistence of an intra-uterine and extrauterine pregnancy.It occurs in about 1 in 30,000 naturally conceived pregnancies. The risk increases 1-3% for pregnancies occurring through assisted reproductive technologies.(ART)[1.] Other risk factors includes prior ectopic, prior tubal surgery,prior pelvic inflammatory disease and use of intrauterine contraceptive device.

Around 50% of heterotopic pregnancies are asymptomatic .When symptomatic, the main clinical manifestations are abdominal pain due to peritoneal irritation, adnexal mass with or without vaginal bleeding and hypovolemic shock.[3]

The most common ectopic site is the fallopian tube both in spontaneous and ART heterotopic pregnancies. The cornual site is the second most common site, while cervix, ovary, and abdomen is extremely rare. A delayed diagnosis can result in increased rates of morbidity and mortality both for the mother and intrauterine gestation [4].

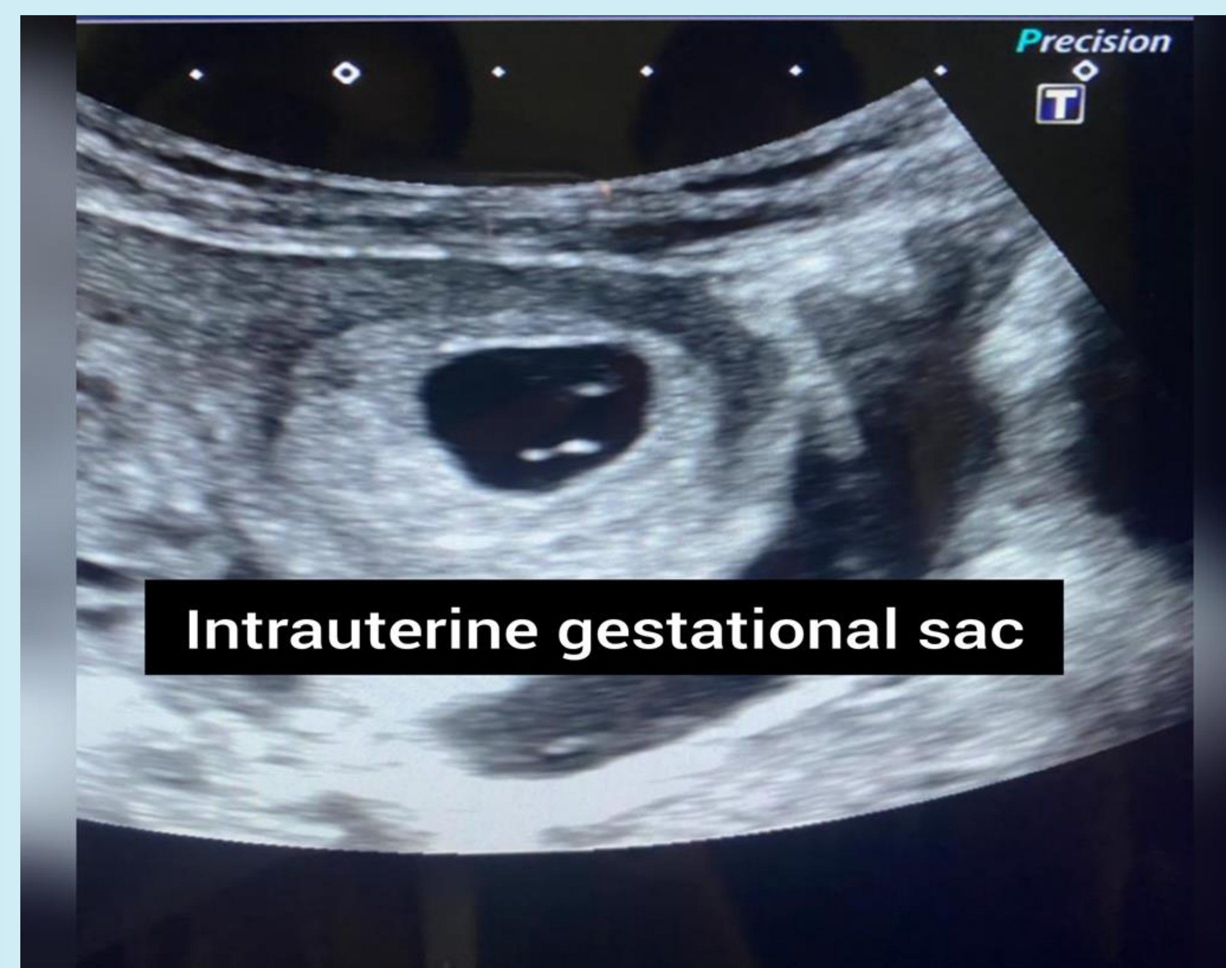
Case Report

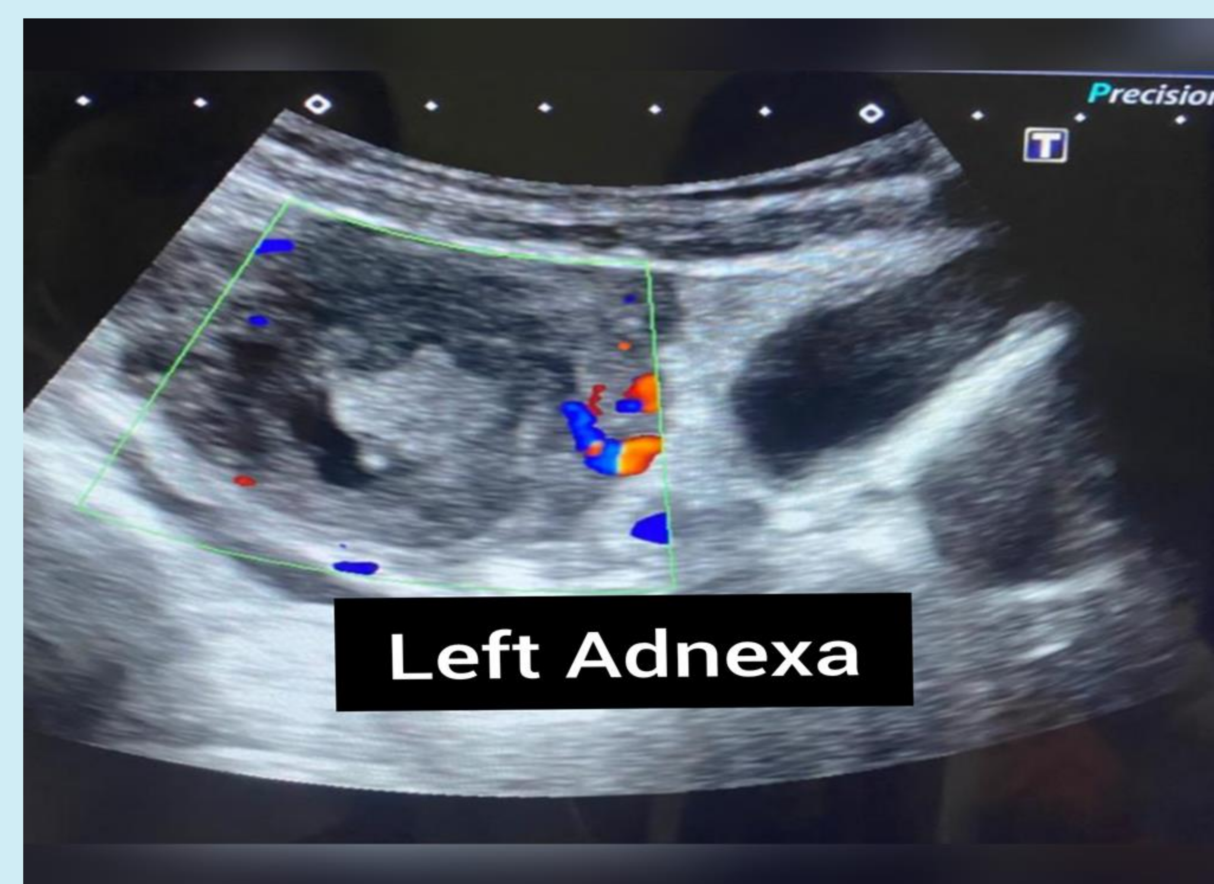
A 28 Year old, Gravida 3 para 2 .with gestational age of 6 weeks presented to us with complain of lower abdominal pain. Trans abdominal ultrasound was done which showed intrauterine gestational sac and yolk sac without fetal pole. Gestational sac measured about 1.8cm.corresponded to 6 weeks of gestational age.On thorough examination of both adnexa a heterogeneous complex lesion noted in left adnexa. Mild free fluid was seen in pelvis.

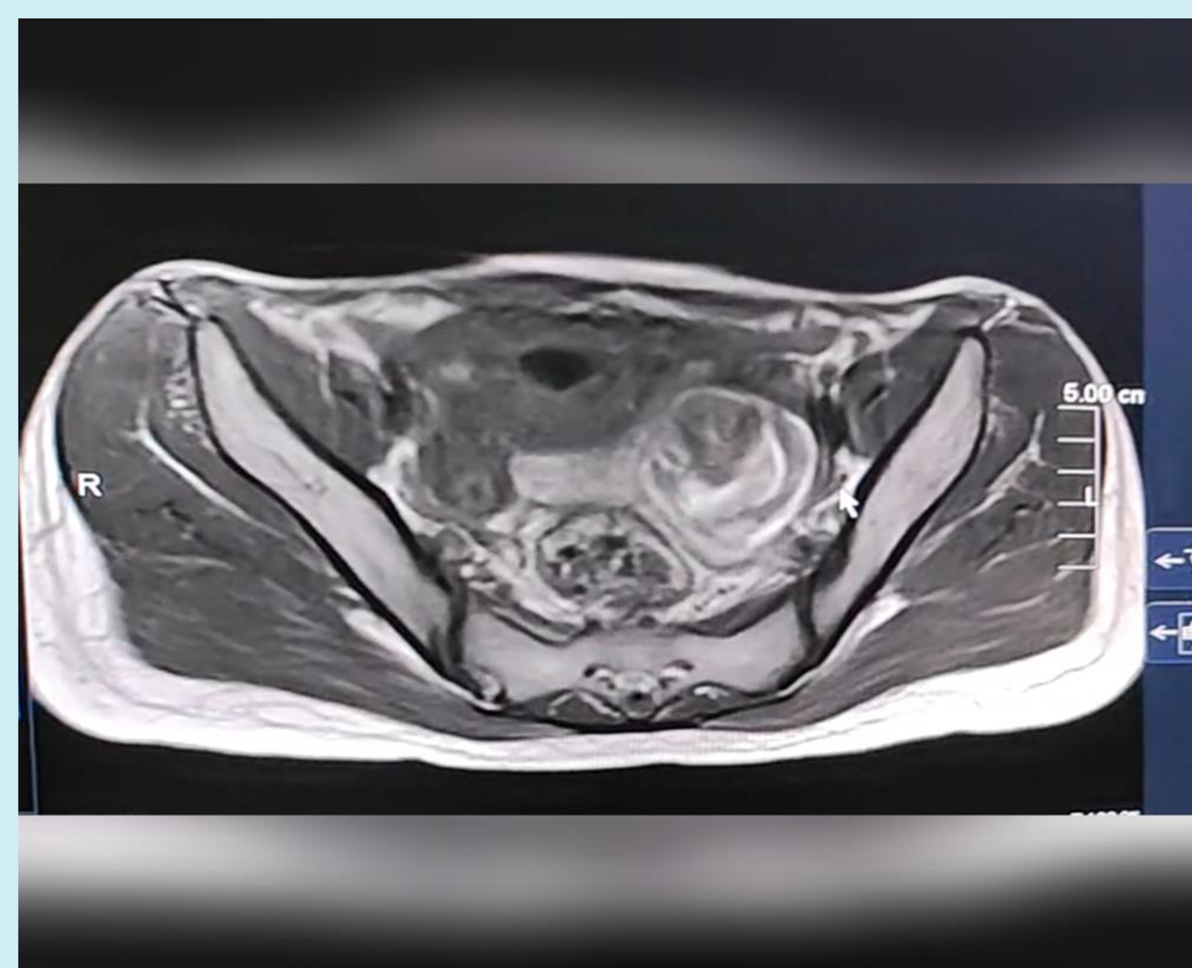
MRI imaging was then done. It showed large ill-defined heterogeneous abnormal signal intensity lesion in left adnexa with mixed hyper and hypointense signals on TIWI & T2WI. It measured about 6.2x5.8x5.0cm. Mild free fluid was seen in pelvis, demonstrated T1W hyperintense signals, suggestive of hemoperitonium.
Both ovaries were normal.

Diagnosis of intrauterine pregnancy with left ruptured ectopic tubal pregnancy was made. Patient was then sent to the obstetrics and gynaecology department where patient underwent laparotomy which revealed left sided ruptured ectopic tubal pregnancy with 1000ml of hemoperitoneum. Left sided salpingectomy was then done .The specimen was sent for histopathology, which confirms the diagnosis of ectopic pregnancy.

On follow-up ultrasound scan after 2 weeks irregular intrauterine gestational sac measuring 1.5cm corresponded to 6 weeks of gestational age was seen without fetal pole. Diagnosis of missed abortion was made. Patient then underwent D&C.







Conclusion

Identifying the intrauterine pregnancy does not exclude the possibility of heterotopic pregnancy, which is more frequent with fertility treatments.Thus adequate viewing of the adnexa becomes necessary in all assessments on the start of pregnancy.[3]

In patients having higher than expected levels of serum beta-hCG but having only single intrauterine, close monitoring by repeated serum beta-hCG levels and transvaginal ultrasound is advisable.[4]

Reference

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Discussion

Heterotopic pregnancy is a relatively rare condition. Early diagnosis of heteropic pregnancy is challenging because of the detection of an intrauterine pregnancy and raised beta-hCG can mask the need to scan the adnexa in an asymptomatic patient.[4.]Heterotopic pregnancies may be obscured in the presence of intrauterine pregnancies, due to the difficulty of differential diagnosis between ectopic pregnancy and hemorrhagic corpus luteum, abortion, neoplasia and adnexal torsion. Many of these can be associated with normal pregnancies, thus resulting in delayed diagnosis.[3]

Ectopic pregnancy needs early diagnosis and management to avoid the high probability of tubal rupture. Heterotopic pregnancies can be asymptomatic in about half of the cases, otherwise, it can be presented by variable clinical presentations mainly abdominal pain, adnexal swelling that may be associated with vaginal bleeding, or even shock due to hypovolemia. Unfortunately, the clinical findings are more frequently presented with tubal rupture [2]. In our case patient was stable presented with complain of lower abdominal pain. Unfortunately diagnosed with left ruptured tubal pregnancy along with intrauterine pregnancy by mean of ultrasound and MRI.

Transvaginal ultrasound found to be better in early diagnosis as compared to transabdominal US. It detects almost 70% of cases between five to eight weeks of gestation . In some centers, magnetic resonance imaging (MRI) is done to rule out heteropic pregnancy [4].

Ultrasound picture of heterotopic pregnancy may be adnexal complex cyst or mass which can be explained by being hematosalpinx, tubal ring, or embryo. Free intra-peritoneal fluid can be seen also. In equivocal cases, MRI can be helpful, it can show an adnexal lesion that may be cystic or looks like a gestational sac. Tubal cystic dilatation with a thickened wall can also be seen, while tubal rupture will cause hematoma.[2]

Treatment possibilities include expectant management, surgical management either laparoscopy or laparotomy and sonography-guided embryo aspiration with or without embryo-killing drugs.[5] In our case patient had ruptured tubal pregnancy so she underwent laparotomy where left salpingectomy was done.