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Successful Surgical Management of a Heterotopic Pregnancy

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Abstract

Spontaneous heterotopic pregnancy is a rare clinical condition in which intrauterine and extrauterine pregnancies occur at the same time .It can be life threatening condition and can be missed easily when the diagnosis being overlooked. Nowadays heterotopic gestation although common with assisted reproductive techniques for subfertility treatment, a high index of suspicion can help in timely diagnosis and appropriate intervention.

Heterotopic pregnancy can pose a diagnostic dilemma because an early transvaginal ultrasound may not diagnose an exutero gestation in all cases [1,2]

The diagnostic role of serum beta-HCG level in heterotopic pregnancy is debatable. Therefore, if the beta-HCG levels are higher for the period of gestation with an intrauterine pregnancy ,one can look for a co-existant tubal pregnancy. Sometimes there are no conclusive adnexal findings and the diagnosis of ectopic pregnancy may be based on other ultrasound features such as haemoperitoneum ,haematosalphinx and free fluid in peritoneum or pouch of douglas.[3]

We report a case of heterotopic pregnancy in a 23 year old woman presented with haemoperitoneum from ruptured tubal pregnancy with live intrauterine gestation of 7 weeks ,diagnosed on transvaginal ultrasound.

Keywords *: Heterotopic pregnancy,spontaneous conception, adnexal mass, haemoperitoneum.*

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Case Report

A 23 year old woman with 7 weeks of amenorrhoea presented with clinical features of shock. Urine pregnancy test was positive. Transavaginal ultrasound revealed moderate quantity of free fluid in peritoneal cavity with a complex right adnexal mass. Along with a live intrauterine gestation of 7 weeks.(fig.1)

On general examination, patient was pale ,pulse rate was 110 bpm, blood pressure was 90/60mm hg .On per abdomen examination, there was guarding and rigidity in the hypogastric region. On per speculum examination external os was closed with no visible bleeding. On per vaginal examination, uterus was 6-8 weeks size, tender adnexal mass was felt in right fornix. Left fornix was free and non tender. Her investigations revealed Hb% of 7gms, HIV ,HbsAg – negative and blood group was B positive. Coagulation profile was normal. Two pints of packed cells were arranged and patient was immediately taken for laparotomy. Laparotomy findings revealed haemoperitoneum with right sided ruptured ectopic gestation(fig 2,3). Left side fallopian tube was normal .Uterus was 6-8 weeks size. Right sided salpingo-oopherectomy was done and specimen was sent to HPE, which revealed ectopic gestation.

Post operative period was uneventful. Sutures were removed on 8th post operative day and she was followed up with live normal intrauterine gestation till term and she delivered a live baby vaginally.

Discussion

Hetrotopic pregnancy is defined as presence of multiple gestation with one being in uterine cavity and the other outside the uterus, commonly in fallopian tube and uncommonly in cervix or ovary [4] . However

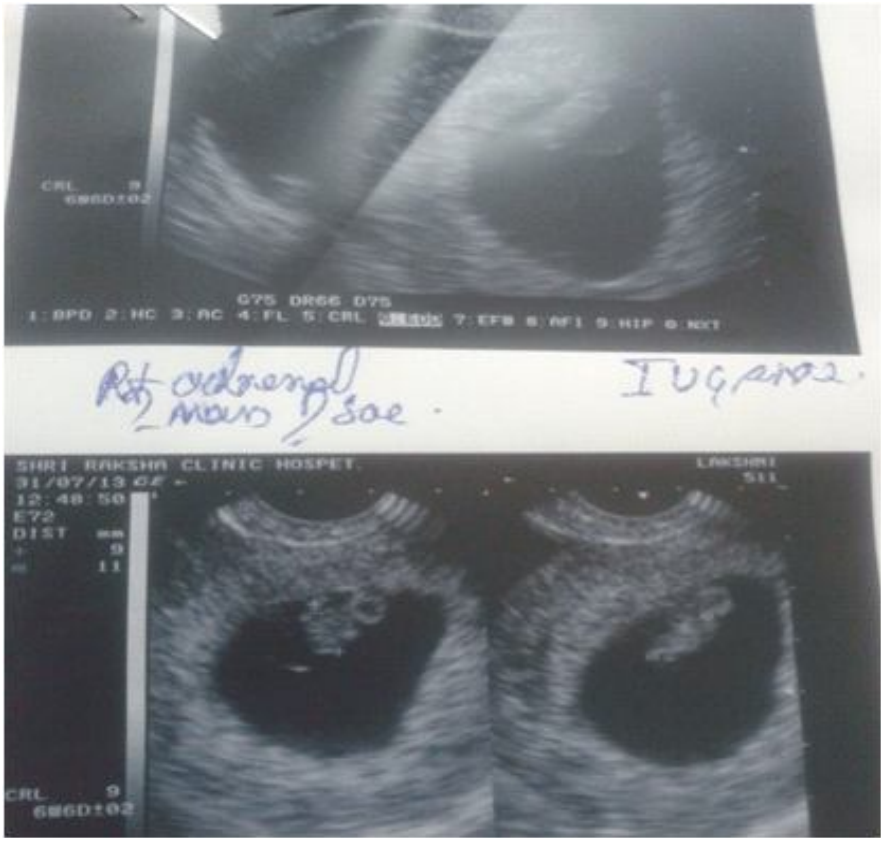

Fig. 1a: TVS showing adnexal mass .
Fig. 1b: Intrauterine geatation with cardiac activity.

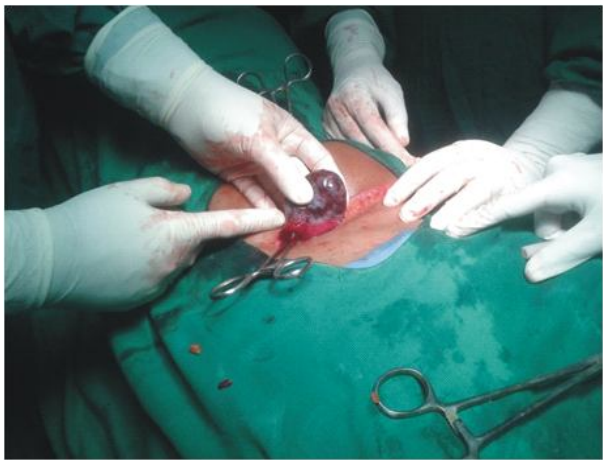

Fig. 2 a: Right sided ruptured ectopic pregnancy.

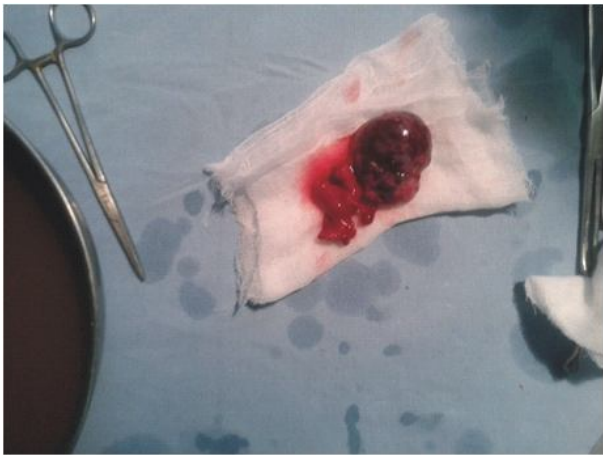

Fig. 2b: Specimen of right tube with ruptured ectopic.

spontaneous heterotopic pregnancies are quite rare. The incidence being 1in 30000 pregnancies[5].

Heterotopic pregnancies can pose a diagnostic dilemma because an early transvaginal ultrasound may not diagnose an exutero gestation in all cases because the presence of haemorrhagic corpus luteum can confuse and delay the diagnosis of heterotopic pregnancy.[6] The recent advancement in transvaginal ultrasonography(TVS) helped in early diagnosis of heterotopic pregnancy. However the sensitivity of TVS in diagnosing heterotopic pregnancy is only 56% at 5-6 weeks [7]. If the pregnancy is less than 6 weeks ,the

diagnosis is the presence of a cardiac activity. At times even with TVS, the adnexal sac can be mistaken for a haemorrhagic corpus luteum or ovarian cyst, especially in hyperstimulated ovaries [8].

However, with increasing use of assisted contraception techniques, clinicians must be alert to the fact that confirming an intrauterine or ectopic pregnancy clinically or by ultrasound. After diagnosis, the ectopic component in case of rupture is always treated either laproscopically or laparotommically with continuation of existing intrauterine pregnancy. In case the ectopic pregnancy was detected early and was unruptured, treatment options include expectant management with aspiration and instillation of potassium chloride or prostaglandin into gestational sac. Systemic or local injection of Methotrexate cannot be used in heterotopic pregnancy owing to its toxicity, although some authors have used instillation of a small dose [9]. Nowadays with advancement in technology gold standard treatment is laproscopic approach without disrupting the course of an intrauterine gestation [9].

Conclusion

With the advanced infertility treatment there is increase in incidence of heterotopic pregnancy. Although it is a rare extremity in natural conception it requires a high index of suspicion for early and timely diagnosis. A timely intervention can result in a successful outcome of the intrauterine fetus.

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