



An interesting case of heterotopic pregnancy following spontaneous conception

KEYWORDS

Heterotopic pregnancy, intrauterine pregnancy, ectopic pregnancy

Garg Vineeta

Associate Professor, Dept. of Obstetrics and Gynecology, Rajasthan University of Health Sciences & Medical College Jaipur

Bhatnagar Beena

Ex- Prof., Dept. of Obstetrics and Gynecology, Mahila Chikitsalya SMS Medical College, Jaipur.

Introduction

Heterotopic pregnancy is defined as the coexistence of intrauterine and extra uterine gestation. The incidence appears to be on rise following ART and rising incidence of PID¹. The incidence was originally estimated on theoretical basis to be 1 in 30,000 pregnancies. However more recent data indicate that with the advent of assisted reproductive techniques, the incidence is approximately 1 in 7000 overall and as high as 1 in 900 with ovulation induction²

Case report

We reported an unusual case of coexistent live intrauterine and ectopic pregnancy diagnosed by sonography and proven by surgery and histopathology.

A 30 year old gravida 2 para 1 with previous LSCS 3yrs back conceived spontaneously (LMP-30-01-06). Her previous menstrual cycles were regular. She complained of spotting per vaginum on 16-03-06, Transabdominal sonography showed single viable intra uterine pregnancy of approx. 5 weeks + 6 days gestational age with low implantation and active corpus luteum in left ovary. She was hospitalised at Mahila Chikitsalya, Jaipur on 21-03-06 with complains of vomiting and acute pain in lower abdomen. Repeat transabdominal ultrasonography on 21-03-06 showed single viable intra uterine gestational sac of 7 weeks with normal left ovary. She was given symptomatic treatment and was discharged. She again had an attack of severe vomiting and acute pain in lower abdomen on 23-03-06 which was not relieved by usual analgesics.

A Doppler flow study was done which showed an intrauterine and extrauterine live pregnancy of 7-8 weeks and hypoechoic area seen in right iliac fossa suggestive of appendicitis and right tubal ectopic pregnancy. There was minimal free fluid in pouch of Douglas.

There was no history of fever, constipation or any urinary problem. On examination, she was pale (Hb 7.8gm%) with pulse rate 100/ min and BP- 110/70 mm Hg. On abdominal examination, the abdomen was soft with marked tenderness in right iliac fossa with abdominal guarding. On P/V examination, no definite adnexal mass was appreciated. Cervical movement showed marked tenderness.

Emergency Laparotomy was performed and revealed marked haemoperitoneum. On exploration right sided ruptured tubular pregnancy was identified with adherent ovary. The uterus was found to be enlarged approx. 8 weeks size. Right salpingoophrectomy was done. Appendix visualized, it was inflamed, hence appendectomy done. Peritoneal lavage was done with normal saline. One unit blood was transfused intraoperatively. The intrauterine pregnancy was not disturbed.

Histo-pathological examination confirmed presence of chorionic villi thereby suggesting tubal ectopic pregnancy and acute inflammation in appendix.

Postoperatively patient was discharged on 30-03-06 with repeat USG showing single live fetus of 8 weeks. She was given folic acid supplementation and hormonal support (Inj. HCG weekly) up to 12-

15 weeks of gestation. Follow up with serial USG assured normal growth of fetus till completion of 7th month. At 32 weeks period of gestation patient developed Pregnancy induced Hypertension which was controlled with Antihypertensives. At 36 weeks period of gestation, color doppler alarmed live compromised fetus of 34-35 weeks with EFW 2322 gm. Umbilical artery showed high resistance with evidence of brain sparing effect. Hence emergency cesarean section done on 5-10-06. A female baby of 2.5 Kg. with two tight loops of cord around the neck was extracted.

Discussion

Heterotopic pregnancy is a life threatening condition and early diagnosis is often difficult. A high index of suspicion is very important. Continued enlargement of the uterus and a positive pregnancy test after treatment of an ectopic pregnancy confirms the diagnosis. The prognosis of the intrauterine pregnancy is usually good and laparotomy for concurrent ectopic pregnancy does not appear to disrupt the intrauterine gestation when the gestational sac on ultrasonography is consistent with dates. Surgical intervention to avoid the potential detrimental effects of hemorrhagic shock must be a priority. The uterus should be only minimally and carefully handled in order to avoid disturbing the pregnancy.³

Occurrence of heterotopic pregnancy in this case following spontaneous conception may be due to inflamed appendix in close proximity with Rt.fallopian tube causing salpingitis and decreased tubal motility thus favoring tubal nidation.

The treatment is operative for ectopic pregnancy and management of intrauterine pregnancy if viable depends on the patient's wish. This patient opted to continue the intrauterine pregnancy and had a successful outcome.

Previous two transabdominal ultrasonography before diagnosis of heterotopic pregnancy were normal. Hence this case put a direct question on our sonologist, who once diagnosing an early intrauterine pregnancy did not attempt to visualize adnexa of pregnant woman.

Conclusion

Although the occurrence of heterotopic pregnancy is a rare in the general population, the incidence is more in those undergoing Assisted Reproductive Technology. Hence anticipation based on the type of procedure and vigilance from the basal scan itself will enable one to prevent catastrophic events and provide a better outcome.⁴

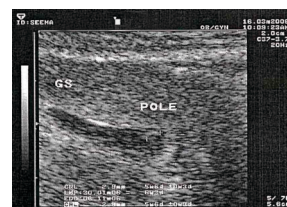


Fig. 1 : Transabdominal ultrasonography on 16-03-06 revealed single intrauterine gestational sac of 5 weeks + 6 days.

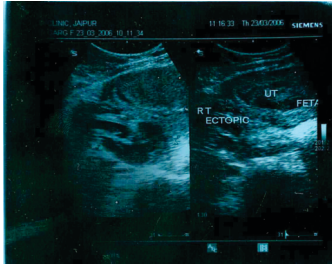


Fig. 2 : Transabdominal ultrasonography on 23-03-06 revealed intrauterine and extrauterine live pregnancy of 7-8 weeks.

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