International Journal of Health Sciences and Research
Volume 15; Issue: 1; January 2025
Website: www.ijhsr.org
Case Report *ISSN: 2249-9571*

Spontaneous Conception of Heterotopic Pregnancy (A Rare Phenomenon) - A Case Report

Dr. Sangita Das Baidya[1], Dr. Swapnil Shrestha Rai[2]

[1]Obstetrician and Gynaecologist, Unakoti Hospital, The Hope, Kailasahar Tripura,
[2]Senior Consultant, Department of Obstetrics and Gynaecology, IGM Hospital, Agartala
[1]Department of Obstetrics and Gynaecology, [2]Department of Obstetrics and Gynaecology, IGM Hospital, Agartala, Tripura, India.

Corresponding Author: Dr. Sangita Das Baidya.

DOI: https://doi.org/10.52403/ijhsr.20250126

ABSTRACT

Heterotopic pregnancy is the coexistence of an intrauterine and an ectopic gestation, occurring 1 in every 30,000 pregnancies [1]. In the modern era with the advancements in ART (Assisted Reproductive Technologies) there is an increased incidence of Heterotopic pregnancies, 9 in every 10,000 pregnancies [1], however the spontaneous occurrence of the same does still remain a rare phenomenon making it difficult to diagnose and not giving rise to clinical suspicion in the absence of common risk factors. Here we present a 27 years old lady with a Heterotopic pregnancy with no risk factors as mentioned, who presented in a state of shock, diagnosed with an intrauterine dead embryo of 8weeks 5 days and a ruptured left sided ectopic gestation. Salpingectomy and evacuation of the intrauterine product of conception was performed. Early diagnosis and a precise reporting in the Ultrasound decrease the mortality.

Keywords: Heterotopic pregnancy, Ectopic pregnancy, ART, Salpingectomy.

INTRODUCTION

Heterotopic (also called heterotropic) pregnancy is the simultaneous occurrence of two pregnancies in two different implantation sites. Most of the time one of the pregnancies is intrauterine and the other is ectopic pregnancy. Heterotopic pregnancy is estimated to occur 1 case per 30,000 pregnancies [1]. However, with ART their incidence is higher and is 9 cases in 10,000 pregnancies.[1]

Spontaneous heterotopic pregnancy in particular pose a real challenge for healthcare professionals not only in treatment but also in diagnosis, due to their rarity and unexpected occurrence. Heterotopic pregnancy may give a false assurance of an ongoing intrauterine pregnancy excluding the presence of an extrauterine pregnancy.[1]

In our study we report a case of a spontaneous conception resulting in a heterotopic pregnancy make it a rare occurrence.

CASE PRESENTATION

A 27 year old G2P1001 with previous 1 vaginal delivery 7 years back, presented to the emergency department with history of severe pain abdomen, vaginal bleeding following 8 weeks of amenorrhea in a collapsed condition with severe hypovolemic shock. Her recorded vitals were Pulse- 122 bpm, BP-80/50 mmHg, SPO2-96% in room air, with severe pallor and cold clammy extremities and severe

abdominal tenderness. An urgent Urine pregnancy test was done which showed positive and she was brought to the Labour Room for further management. She was immediately resuscitated with IV crystalloids and colloids, all baseline investigations were sent and a bedside USG was done which showed- an intrauterine gestational sac of 8weeks5days with no cardiac activity and a left sided ruptured tubal ectopic pregnancy suggesting the diagnosis of a heterotopic pregnancy. 3 units of blood was arranged and patient was immediately taken up for exploratory laparotomy under GA. Abdomen was opened with midline vertical incision and about 1.5 litres of haemoperitoneum was drained, left sided tubal rupture was found in the ampullary region and left salpingectomy was performed. After achieving adequate hemostasis abdomen was closed in layers with an in-situ intraperitoneal drain. Intrauterine pregnancy was also evacuated and all samples were sent for histopathological examination. Patient was then managed in post operative ward conservatively and successfully discharged after 7 days with improved condition.

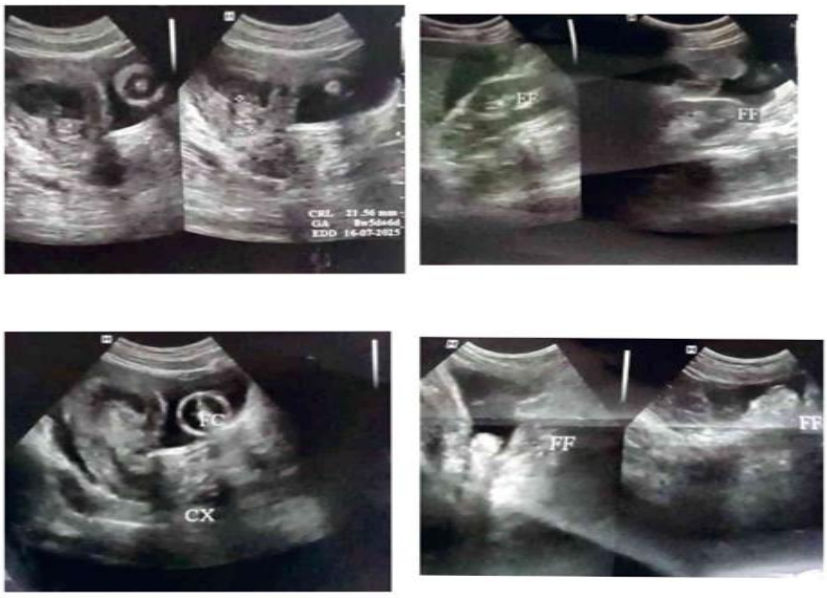

Figure 1: Ultrasound pictures of one intrauterine gestation and one ruptured ectopic with free fluid in peritoneum suggestive of haemoperitoneum.

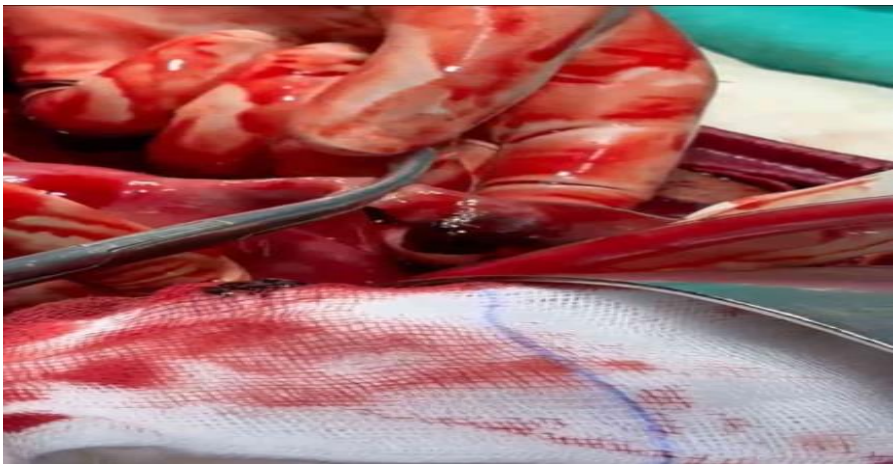

Figure 2: Intraoperative picture of left sided tubal ruptured ectopic gestation.

Table 1: Investigations

Tests	Values
hemoglobin	6.8 gm%
TLC	25000/cu mm
Platelet count	1 lakh/ cu mm
LFT	normal
Blood urea	32 mg/dl
Serum creatinine	0.9 mg/dl
RBS	112 mg/ dl
Viral markers	Non reactive

DISCUSSION

Heterotopic pregnancy is a very rare condition and pose a great challenge in diagnosis as asymptomatic and seeing an intrauterine pregnancy can add to the confusion until women present with serious clinical presentations like tubal rupture, acute abdomen, shock[3]. However its incidence has increased with emergence of ART[4]. Other risk factors for heterotopic pregnancy include inflammatory bowel disease, use of intrauterine spirals, ovarian hyperstimulation syndrome and ectopic pregnancies in the past.[5]

Ectopic pregnancies can be a life-threatening condition and still remains a cause of upto 9-14 % [2] of maternal mortality maximum in 1st trimester. The early diagnosis of ectopic pregnancy is possible due to a combination of ultrasound and serum measurements of B-hcg. Another concept in the early diagnosis of ectopic pregnancies is the discriminatory zone with levels 1500-2000 IU/ml [6].

In Heterotopic pregnancies however use of serial measurements of B-hcg, commonly used in early diagnosis of ectopic, are unlikely to be useful. This thus pose an increased risk of misdiagnosis, with women presenting at later stages and have already ruptured before a diagnosis was made.

Ultrasound remains the main modality of imaging in any pregnancy, however a few of patients may require further imaging using MRI to provide additional information.

Treatment of any heterotopic pregnancy should aim to target the ectopic pregnancy without affecting the ongoing intrauterine pregnancy [3]. Viable intrauterine pregnancy is an absolute contraindication for systemic methotrexate therapy [5]. Laparoscopy or laparotomy followed by salpingectomy or salpingotomy is the preferred treatment modality, other than providing definitive treatment they also can help in confirmation of the diagnosis via direct visualization.

CONCLUSION

Heterotrophic pregnancy remains a very rare condition and healthcare professionals should always keep it as a differential diagnosis while dealing with early pregnancy complications suggestive of ectopic gestation. Thus, early diagnosis and treatment can provide a successful outcome.

Declaration by Authors

Acknowledgement: Dr. Ashish Debbarma (Obstetrician and Gynaecologist), Bhupesh Debnath.

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. Williams Obstetrics 26th edition F. Gary Cunningham, Kenneth J. Leveno, Jodi S. Dashe, Barbara L Hoffman, Catherine Y. Spong, Brian M. Casey, Section 5, chapter 12, page 232.
2. Mullany K, Minneci M, Monjazeb R, C Coiado O. Overview of ectopic pregnancy diagnosis, management, and innovation. Womens Health (Lond). 2023 Jan-Dec;19:17455057231160349. doi: 10.1177/17455057231160349.
3. Abdelmonem AH, Sayed G, Abugazia AE, Kohla S, Youssef R. Heterotopic pregnancy after a spontaneous conception a case report with a review of clinical, laboratory and imaging findings. Clin Case Rep. 2021 Aug 16;9(8):e04649. doi: 10.1002/ccr3.4649.
4. Forough Javanmanesh,, Mina Moeini. Heterotopic Pregnancy: A Ca Case Report. Journal of Obstetrics, Gynecology and Cancer Research. 2018;3(3):13
5. Didziokaite, G.; Vitaityte, M.; Zykute, G.; Paliulyte, V.; Samuilis, A. Angular Heterotopic Pregnancy: Successful Differential Diagnosis, Expectant Management and Postpartum Care.

Medicina 2021, 57, 1207. https://doi.org/10.3390/ medicina57111207

6. Condous G, Kirk E, Lu C, Van Huffel S, Gevaert O, De Moor B, De Smet F, Timmerman D, Bourne T. Diagnostic accuracy of varying discriminatory zones for the prediction of ectopic pregnancy in women with a pregnancy of unknown location. Ultrasound Obstet Gynecol. 2005 Dec;26(7):770-5. doi: 10.1002/uog.2636.

How to cite this article: Sangita Das Baidya, Swapnil Shrestha Rai. Spontaneous conception of heterotopic pregnancy (a rare phenomenon) - a case report. *Int J Health Sci Res.* 2025; 15(1):203-206. DOI: *10.52403/ijhsr.20250126*

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