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Case Report

A rare case of heterotopic pregnancy: case report

Nisi Patel*, Komal Patel, Bipin R. Shah

Department of Obstetrics and Gynecology, CUSMCH, Surendranagar, Gujarat, India

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***Correspondence:**

Dr. Nisi Patel,

E-mail: nisi0402@gmail.com

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ABSTRACT

Heterotopic pregnancy is defined as the coexistence of intrauterine and extrauterine gestation. The incidence is low and estimated to be 1 in 30,000 of spontaneous pregnancies though it is becoming commoner with assisted reproductive technique. It can be a life-threatening condition and can be easily missed with the diagnosis being overlooked. We present a rare case of spontaneous heterotopic pregnancy with intrauterine gestation without cardiac activity and unruptured tubal ectopic.

Keywords: Heterotopic pregnancy, Unruptured, Medical management

INTRODUCTION

Heterotopic pregnancy is a rare complication usually seen in populations at risk for ectopic pregnancy or those undergoing fertility treatments. It is a potentially dangerous condition occurring in only 1 in 30,000 spontaneous pregnancies. With the advent of assisted reproduction techniques (ART) and ovulation induction, the overall incidence of heterotopic pregnancy has risen to approximately 1 in 3,900 pregnancies. Other risk factors include a history of pelvic inflammatory disease (PID), tubal damage, pelvic surgery, uterine Mullerian abnormalities, and prior tubal surgery. Fatal condition, rarely occurring in natural conception cycles. Most commonly, heterotopic pregnancy is diagnosed at the time of rupture when surgical management is required. Presentation is vague and 45% of patients have no symptoms. Differential diagnosis: endometritis, incomplete miscarriage, ruptured ovarian cyst, non-GYN cause (i.e., appendicitis or UTI).¹

Transvaginal ultrasound is the key to diagnosing heterotopic pregnancy. However, it continues to have a low sensitivity because the diagnosis is often missed or overlooked. Therefore, the diagnosis is often delayed

leading to serious consequences. Surgical intervention plays a key role in the management of heterotopic pregnancy. The goal is to remove the ectopic pregnancy without jeopardizing the intrauterine pregnancy. Laparoscopic salpingectomy is the standard surgical approach of heterotopic pregnancy.^{2,3} Other management options mentioned in the literature include local injection of potassium chloride, hyperosmolar glucose, or methotrexate into the sac under ultrasound guidance followed by aspiration of the ectopic pregnancy. This paper represents case of heterotopic pregnancy with medical management as well as review of literature.

CASE REPORT

A 23-year-old female, G2P1L1A0 presents with severe abdominal pain. Have positive urine pregnancy test. Her beta HCG was 65726. Ultrasound showed a single intrauterine gestational sac measuring 16 mm with no cardiac activity and with a right tubal unruptured ectopic pregnancy with Gsac13 mm size. It is centrally anechoic with peripheral surrounding ring of tissue. Findings raise the possibility of an associated ectopic pregnancy.⁴ Patient hemodynamically stable. On per vaginal examination she had right forniceal tenderness present.

On TVS examination single intrauterine 5-weeks size gestational sac and rights sided unruptured tubal ectopic pregnancy present. prob tenderness present. Patient want termination of pregnancy. So, patient admitted in obstetrics and gynecology ward. Medical management done with injection methotrexate for Tubal ectopic pregnancy and tab. misoprostol and mifepristone for termination of intrauterine pregnancy.

Determined the patient vitally stable. medical management started with day 1 injection methotrexate (50 micro gm) IM stat and tablet mifepristone (200 mg orally). On day 3 tablet tab misoprostol 400 micro gm sublingually after 4-hour same dose of tab misoprostate repeated. On day 4 injection methotrexate (50 micro gm) stat and tablet misoprostol 400 micro gm sublingually given. vitals monitoring done. Patient was discharged on day 5 on discharge TVS finding: uterus anteverted just bulky with right side unruptured tubal ectopic pregnancy without cardiac activity and decrease Gsac size. On follow up on day 7th after discharge her beta HCG was 386.59.



Figure 1: Heterotopic pregnancy.

DISCUSSION

Heterotopic gestation is defined as the coexistence of uterine and extrauterine gestation commonly in the

fallopian tube and uncommonly in the cervix or ovary. Majority of the reported cases are of singleton intrauterine pregnancy. triplet and quadruplet heterotopic gestation have also been reported, though the incidence was extremely rare pregnancy. Spontaneous heterotopic pregnancy is quite rare and the estimated incidence was 1 in 30,000 in spontaneous pregnancies, in general population a fairly estimate was 1 in 7000 pregnancies. With assisted reproduction techniques, this incidence increases to 1 in 100 pregnancies. There were number of risk factors for heterotopic pregnancy, such as previous tubal damage, ectopic pregnancy and assisted reproduction technique like in vitro fertilization, gamete intrafallopian transfer, also reported with pharmacological ovulation induction.^{5,6} Intrauterine pregnancy with hemorrhagic corpus luteum can simulate heterotopic pregnancy or ectopic gestation both clinically and on sonography. Bicornuate uterus with gestation in both the horns also mimic a heterotopic pregnancy. Taylor and coworkers have described a high-resolution transvaginal ultrasonography with color Doppler will be helpful as the trophoblastic tissue in the case of heterotopic pregnancy shows increased flow with significantly reduced resistance index is an important aid in the diagnosis of the heterotopic pregnancy, heterotopic pregnancy is most likely to be missed in natural conception, unless the USG facility is available and sonologist is aware and carefully screen the tubes and the pelvis if overlooked, it may present with rupture and acute abdominal syndrome which can progress to maternal shock leading to maternal mortality.^{7,8} The management of heterotopic pregnancy is laparoscopy or laparotomy for the tubal pregnancy. Laparotomy may be the treatment of choice in cases with serious intra-abdominal bleeding or in patients with hemodynamic instability due to hemorrhagic shock. The survival rate of an intrauterine pregnancy with favorable outcome reported in 50-66% of cases.^{9,10}

In this case patient have heterotopic pregnancy and patient is hemodynamically stable with unruptured tubal ectopic. As she wants termination of pregnancy medical management was done.

CONCLUSION

Heterotopic pregnancy is an extremely rare finding; even in those patients with risk factors. clinicians should always keep heterotopic pregnancy in the differential diagnosis in a reproductive patient with abdominal pain and signs or symptoms of ectopic pregnancy. They must be alert to the fact that confirming an intra uterine pregnancy clinically or by ultrasound does not exclude the coexistence o of an ectopic pregnancy. A high index of suspicion in women is needed for early and timely diagnosis, and medical management in vitally stable patients and laparotomy or laparoscopy can result in a favorable successful obstetrical outcome with ruptured ectopic pregnancy with Intrauterine pregnancy.

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