



in Natural Conception, Heterotopic Pregnancy at 19 weeks Gestation: a case report

KEYWORDS

Heterotopic pregnancy, Ectopic pregnancy, Ultrasonography, Laprotomy

Dr. Pankaj Patil

Associate Professor, Dept of Obs & Gyne, MGM Medical College, Navi Mumbai

Dr. Pushpa Mathur

Associate Professor, Dept of Obs & Gyne, MGM Medical College, Navi Mumbai

Dr. Charushila Shinde

Assit Professor, MGM Medical College, Navi Mumbai

ABSTRACT A heterotopic pregnancy is defined as a coexisting intrauterine & extra uterine gestation. In normal conception its incidence is very rare i.e 1: 30,000. It's diagnosis requires a high index of suspicion. Here we discussed a case reported the emergency department of Obs & Gyne, MGM medical college Navi Mumbai, A case of heterotopic pregnancy of 19 weeks gestation presenting with acute abdominal pain and signs of hypovolumic shock was reported. The diagnosis was confirmed by ultrasonography. Emergency laprotomy was done.

Introduction-

Heterotopic pregnancy is diagnosed as combined intrauterine and extra uterine gestations at two or more implantation sites. It was first reported in the year 1708 by Duverney as an autopsy finding in a patient who died of ectopic pregnancy who also had an intrauterine pregnancy. ⁽¹⁾ We report a case Heterotopic pregnancy in a 23years old female in a natural conception cycle that presented in the emergency department as ruptured ectopic pregnancy of 19 weeks gestation.

Case History-

A 23 years old married female with previous 2 full term normal deliveries with live babies was seen in the emergency department of Obs & Gyne, MGM medical college Navi Mumbai, with a history of acute lower abdominal pain of 5 hours duration. She was 19 weeks pregnant. It was a spontaneous conception. No past history of abortion, pelvic inflammatory disease or any history of abdominal surgery. Last vaginal delivery was 18 months back. Patient was not registered at anywhere, so no previous record was available regarding this pregnancy. She was in hypovolumic shock.

On examination, her pulse rate was 140 beats per minute and blood pressure was 90/40 mm of mercury. She was drowsy with severe pallor and cold extremities. Abdominal examination revealed a distended abdomen with approximately 18-20 weeks size uterus. Foetal parts were also felt besides the uterus. Pelvic examination revealed an enlarged, soft uterus corresponding to 18-20 weeks, with no forniceal tenderness. Cervix was closed with no bleeding. After initial resuscitation, an ultrasound examination revealed a 18.5 wks dead foetus in the uterine cavity and a 19 weeks dead foetus lying in the abdominal cavity on the left side with moderate amount of free fluid with internal echos in the cul-de sac and Morrison's pouch hence, a diagnosis of heterotopic pregnancy was made. An emergency laprotomy on the patient revealed a gravid uterus with other foetus lying in the abdominal cavity with its placenta partially detached from fimbrial end of the left fallopian tube with active bleeding from the fimbrial end. There were approximately 2000 ml of hemoperitoneum. A left sided salpingectomy was done, with baby weighing 400 gms and placenta 100 gms. Uterus was intact with 19 weeks pregnancy. The second baby and placenta of about the equal weight as the

first twin were delivered. The right fallopian tube and ovary were normal. Post operative period was uneventful and she was discharged on 10th postoperative day.

Discussion-

Heterotopic pregnancy (HP) is diagnosed in presence of multiple pregnancies with one or more intrauterine pregnancies co-existing with an ectopic pregnancy. The incidence is very rare in spontaneous conception and is estimated to be 1 in 30,000 pregnancies ⁽¹⁾ as compared to that due to assisted reproductive techniques (ART) where the incidence is as high as 1% and 2.9% with rampant use of ovulation induction. ⁽²⁾ This is due to the hydrostatic pressure developed during embryo transfer by ART in the affected tubes and peristaltic movements. The common factors that predispose to occurrence of ectopic pregnancy are tubal surgery and pelvic inflammatory disease as well as history of previous ectopic pregnancy. ^(1,3) Early diagnosis is difficult due to absence of specific clinical symptoms. Abdominal pain, adnexal mass, peritoneal irritation and an enlarged uterus as signs and symptoms are suspicious of HP. Therefore a transvaginal ultrasound and assessment of the whole pelvis, even in presence of intrauterine pregnancy, can be an important aid in diagnosis of HP. ⁽¹⁾

A heterotopic gestation is difficult to diagnose clinically. Typically, laparotomy is performed because of tubal pregnancy. At the same time, uterus is congested, softened, and enlarged; ultrasound examination can nearly always show gestational products in uterus. ⁽⁴⁾

In present case the pregnancy was continued till 19 weeks without any antenatal visit and presented only as an emergency case. Majority of tubal ectopic pregnancies do not advance beyond 8-12 weeks. In present case the fetus was lying in the abdominal cavity with the placental implantation at fimbrial end of the tube. This pregnancy could reach upto 19 weeks due to possible absence of stretching of the tube. Subsequent separation of placenta from the fimbrial end lead to fetal death with resultant intraperitoneal haemorrhage and mother went in hypovolumic shock. Maternal shock leads to the death of intrauterine foetus.

In heterotopic pregnancy postnatal complications are mostly related to retained placenta as abdominal pain, abscess formation, sepsis, haemorrhage, etc. To avoid this we could ligate uterine vessels and remove placenta

successfully.^[5] A detailed search for references including the Cochrane database could not reveal any reference to a heterotopic pregnancy reaching gestational age of 19 weeks. The use of ultrasound has not changed the diagnostic ability over a period of time. In a recent literature review from 1994-2004 showed that out of 80 cases 21 were diagnosed by USG and 59 at laparotomy or laparoscopy. Thus, a preoperative diagnosis of HP is still a challenge, especially in developing countries like India. A Heterotopic pregnancy, though extremely rare, requires a very high index of suspicion for early and timely diagnosis; a timely intervention can result in a successful outcome of the intrauterine foetus.^[6]

REFERENCE

1. Bright DA, Craupp FB. Heterotopic pregnancy- a re-evaluation. *J Am Board Fam Pract* . 1990;3: 125-128 . | 2. Callen PW, Ultrasonography in OBGY In : Levine D, editor *Ectopic Pregnancy* 5th edition Philadelphia:Saunders Elsevier;1020-1047 . | 3. Tal J, Haddad S, Gordon N, Timor-Tritschl. Heterotopic pregnancy after ovulation induction and assisted reproductive technologies: a literature review from 1971-1993. *Fertil Steril*;1996;66 :1-12 . | 4. Govindarajan MJ and Rajan R. Heterotopic pregnancy in natural conception. *J Hum Reprod Sci*. 2008 Jan-Jun; 1(1): 37-38. | 5. J B Tripathi, B S Patel, S A Rawal, S Garg. Undiagnosed case of term heterotopic pregnancy with ectopic abdominal pregnancy. *Journal of medical association*,2011 Oct.;109(10),764-765 | 6. Varma TR, Patel RH, Dec 1987. Combined intrauterine and extrauterine gestation: a report of case history and review. *Int J Gynecol Obstet* .25(6) :46v |