Heterotopic Pregnancy with Successful Pregnancy Outcome.

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Abstract

Heterotopic pregnancy is defined as the co-existence of intrauterine and extrauterine gestation. The ectopic component in this study was in right fallopian tube which ruptured and remained in peritoneal cavity causing acute abdomen and shock. The intrauterine component was a viable existence with 7 weeks of gestation. The ectopic component was managed with immediate laparotomy and resuscitation. The intrauterine component was allowed to continue normally. The course of intrauterine pregnancy was uneventful with successful outcome i.e. a healthy mother delivered a healthy baby at term. We had to adopt Cesarean section due to non-progress of labor.

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Key Words: Heterotopic pregnancy/ Successful Pregnancy Outcome.

Introduction

Intrauterine pregnancy has the most likelihood of successful pregnancy outcome. Success is measured by healthy mother and healthy baby at the end of delivery. Implantation elsewhere is considered as ectopic. Ectopic pregnancies are not viable. The condition is an emergency. Early diagnosis and prompt surgical treatment by laparotomy can save the life of a woman. Heterotopic pregnancy is a multi-fetal pregnancy composed of one conceptus with normal uterine implantation coexisting with one implanted ectopically. The condition is rare (approximately 1 per 30,000 pregnancies). Incidence increases with risk factors which are assisted reproductive technologies, salphingitis, intrauterine contraceptive device, congenital anomalies and previous abdominal operation.[1] Accurate diagnosis of heterotopic pregnancy optimizes the life of two existences and nullifies the death chance of both the existences (mother and unborn baby) at a time. We hereby report a case of heterotopic pregnancy, 23 years old primigravia, who had presented at 7 weeks of gestation with no risk factor to be heterotopic.

The ectopic component was managed with immediate laparotomy and resuscitation. The intrauterine component was allowed to continue normally. The course of intrauterine pregnancy was uneventful with delivery of a healthy baby at term by Cesarean section.

Case report

A 23 years old primigravida, was referred to our hospital on 6th May 2017 with the history of amenorrhea for 7 weeks and intermittent pain lower abdomen of 7 day duration. She was married for duration of 1 and half years. The conception was spontaneous and natural. There was no history of abortion, no history of infertility treatment, no history of abdominal

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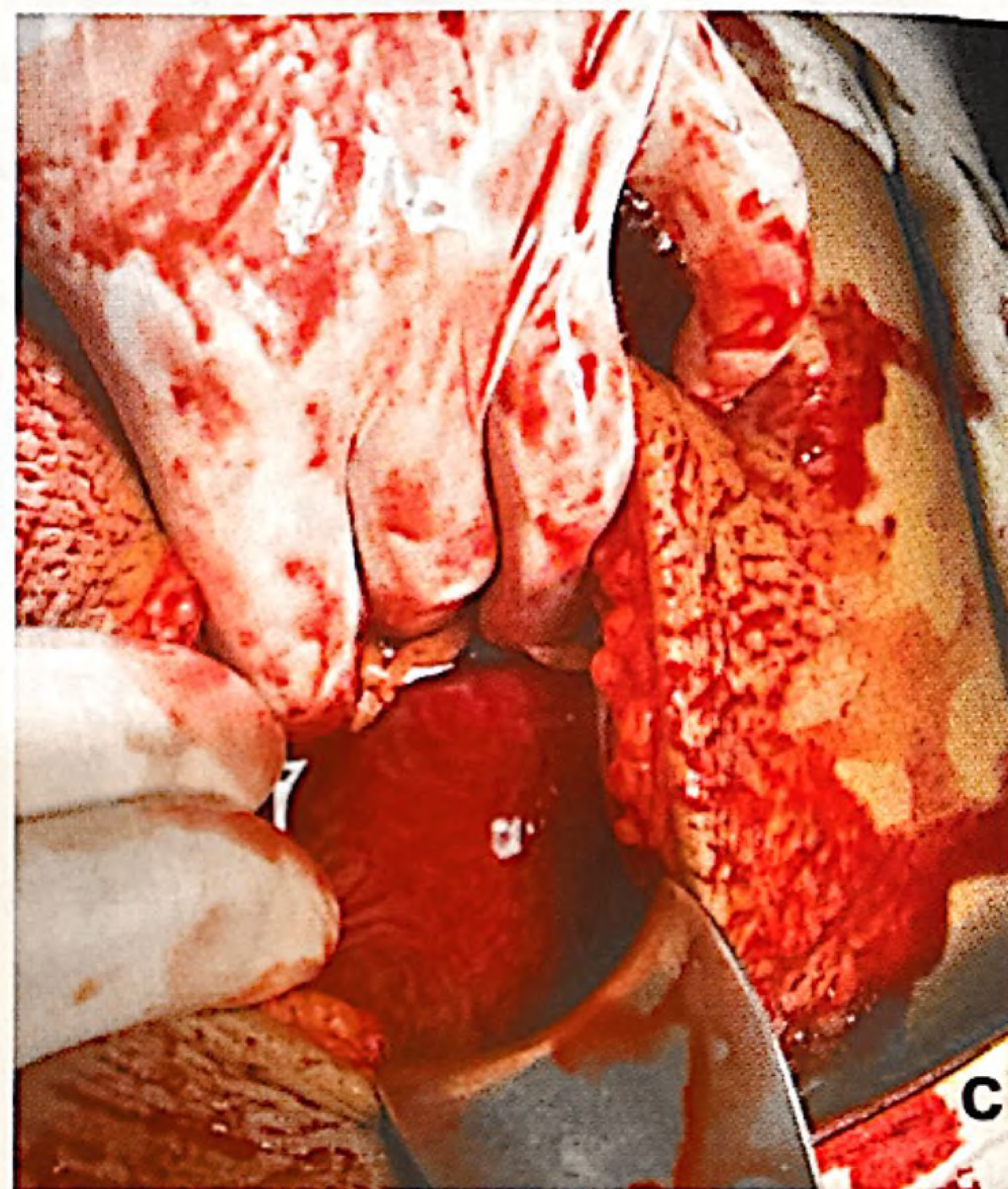
operation. She was not suffering from pelvic inflammatory disease, also not had prior history of treatment for pelvic inflammatory diseases.On admission dated 6th May 2017 her vitals were pulse rate 110/minute, temperature normal, respiration rate 20/minute and blood pressure 90/40 mm Hg. Per abdomen examination abdomen was tense, tender and mildly distended. Clinical picture was suggestive of acute abdomen with shock. Pelvic examination revealed that she had an enlarged uterus corresponding to 7 weeks size of gestation with closed cervix and a tender right adenexa. Her hemoglobin level was 8.0 gm/dl and urine for pregnancy test was positive. Transabdominal ultrasonography showed moderate amount of fluid in the peritoneal cavity with a live intrauterine gestation of about 7 weeks.A complex (4.5 × 4.0) cm size right adnexal mass was present and left adnexal seems to be normal. Provisional diagnosis was heterotopic pregnancy. Patient underwent emergency laparatomy and resuscitation with transfusion of 3 units of fresh blood. There was ruptured right sided tubal pregnancy with hemiperitoneum of 1.5 liters.Rightsided partial salpingectomy was performed.The intrauterine live gestation was allowed to continue. The patient was followed up every month till the patient delivered a healthy male baby on 17th December 2017at 39 weeks by LSCS for non progress of labor. The birth weight of baby was 3 kg. Postnatal checkups up to 42 days after delivery found mother and baby to be healthy.

Fig: a) Ectopic pregnancy b) Gravid uterus
c) Ectopic mass during salphingectomy



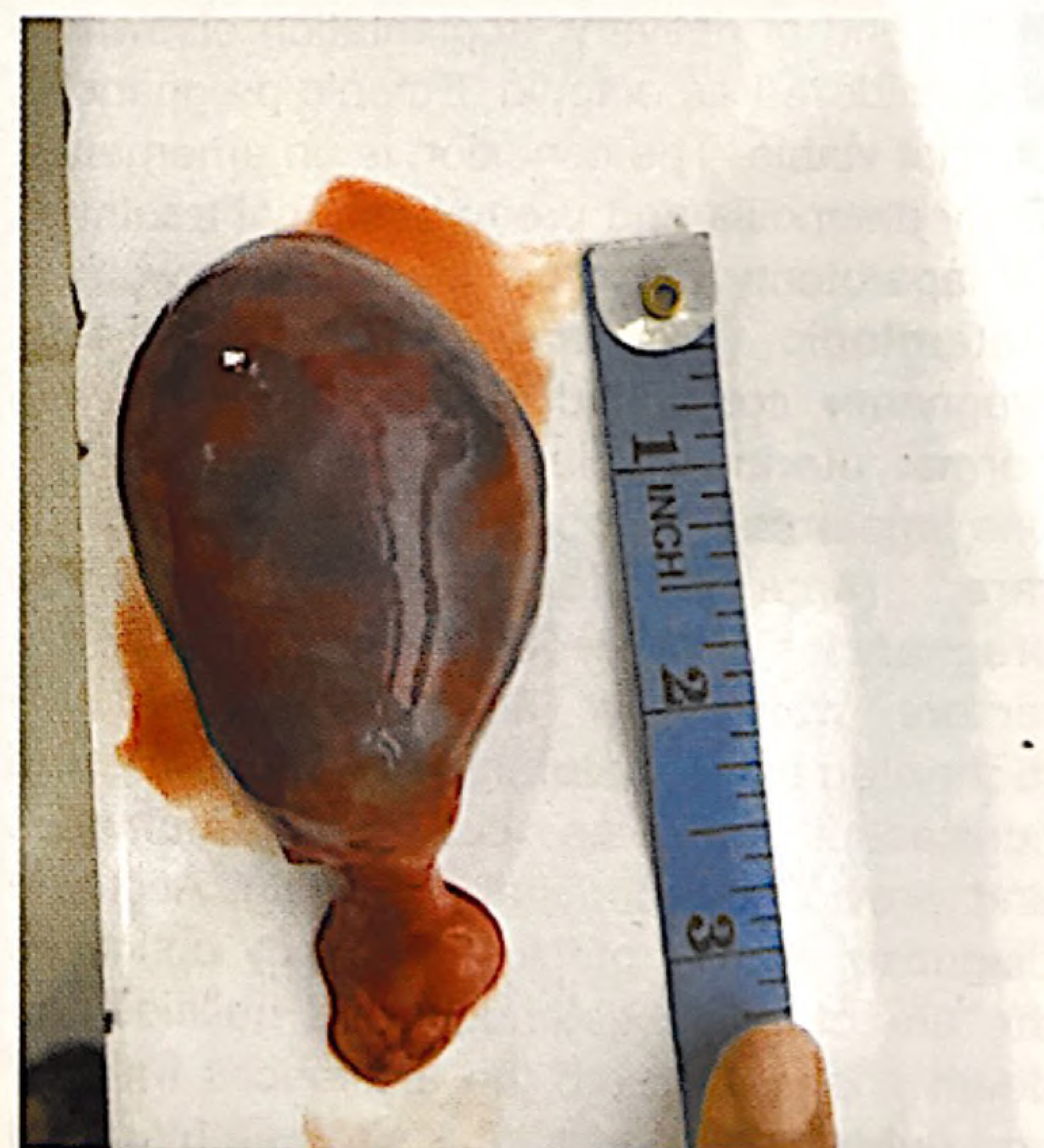


Fig: a) Enlarged gravid uterus.
b)Resected ectopic mass.

Discussion

In this study, the case was 23 years old primigravida with 7 weeks of gestation with clinical features of shock. We managed the ectopic component with emergency

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laparotomy and resuscitation and allowed the intrauterine component to continue and deliver a healthy term baby by Cesarean section due to non-progress of labor.

In heterotopic pregnancy the extrauterine gestation is commonly in the fallopian tube and uncommonly in the cervix or ovary.[1-5]Majority of intrauterine pregnancies are singleton pregnancies, followed by twin pregnancies.[6-7]Heterotopic pregnancy occurs in natural conception as well as conception through assisted reproductive technologies. Risk factors of heterotopic pregnancy are history of infertility, treatment for infertility notably assisted reproduction techniques like in vitro fertilization, gamete intra-fallopian transfer, pharmacological ovulation induction, previous tubal damage, previous ectopic pregnancy, abortion of previous pregnancy, previous pelvic surgery and use of intrauterine contraceptive device.[2, 8-12]Without risk factors the condition is rare (approximately 1 per 30,000 pregnancies).[1]Intrauterine pregnancy peaks in 20-29 yrs, risks of ectopic increases with maternal age while age does not contribute to heteroptopic pregnancy.[13-16]Heterotopic pregnancies are usually diagnosed from 5 to 34 weeks of gestation; 70% between 5 and 8 weeks of gestation, 20% between 9 and 10 weeks and only 10% after the 11th week.[3]The early diagnosis of heterotopic pregnancy is often difficult because the clinical symptoms are lacking. Usually, signs of theextrauterine pregnancypredominate.Four common presenting signs and symptoms are abdominal pain, adnexal mass, peritoneal irritation and an enlarged uterus. Most common presentation is acute abdomen with shock and least common is painless vaginal bleeding.[2,3, 8, 10-12]Intrauterine pregnancy with hemorrhagic corpus luteum can simulate heterotopic pregnancy or ectopic gestation both clinically and on sonography.[17]After diagnosis, the ectopic component in case of rupture is always treated surgically and the IU pregnancy is expected to continue normally.[3]Majority of cases continue to term delivery.[2, 8-12] Concomitant congenital anomaly should be kept in mind. 26 years old African multigravida with a bicornuate uterus presented with 12 weeks history of amenorrhea, lower abdominal pain and bleeding per vagina. Pelvic ultrasound showed an empty uterus and a right adnexal mass. With clinical diagnosis of ectopic pregnancy emergency laparotomy was done. At surgery, she was found to have a bicornuate uterus with an intact pregnancy inside uterus. The pregnancy aborted spontaneously shortly after discharge from hospital. The patient had five previous successful pregnancies which she carried to term with three of her children alive.[18]

Conclusion

A heterotopic pregnancy, though extremely rare, should be kept in mind even if an intrauterine pregnancy is diagnosed and can still result from natural conception and one needs extra efforts to look for heterotopic pregnancy. The high index of suspicion is to ensure for early and timely diagnosis and management.A timely intervention can result in a successful outcome of intrauterine pregnancy and prevent tubal rupture and hemorrhagic shock which can be fatal.

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