CASE REPORT

Heterotopic Pregnancy Ending in IUD and A Subsequent Successful Pregnancy

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ABSTRACT:
A case of heterotopic pregnancy in a 25 years old, 0+0 is reported after clomiphene citrate. This was misdiagnosed by 2 early ultrasound reports, but diagnosed on clinical ground and confirmed on ultrasound at 8 weeks of gestation. Successful Laparotomy for removal of ruptured tubal eetopic was performed saving a viable intrauterine pregnancy. Fetal demise at 28 weeks occurred because of intrauterme growth restriction staring at 25 weeks of gestation. The next spontaneous conception was intrauterme within 1 year and progressed normally till 34 weeks, when caesarean section was performed for decreased fetal movements. An alive male of 2.2 kg delivered and managed in NCU for pre-maturity.

Key words: Amenorrhoea, Heterotopic Pregnancy, Ultrasound, Subsequent Pregnancy.

INTRODUCTION:
Heterotopic pregnancy is a multiple pregnancy with an embryo implanting in the uterine cavity while the other is ectopic. The incidence with spontaneous conception is 1 in 30,000 pregnancies. Infertility increases the risk of ectopic pregnancy while treatment of infertility involving ovulation induction increases the rate of multiple pregnancies. ART and multiple embryo transfers has shown to increase the incidence of heterotopic pregnancy as high as 1 in 100 to 1 in 3000 pregnancies. A careful history, pelvic examination and trans-vaginal ultrasonography with high index of suspicion especially in case of previous history of ectopic pregnancy, ovarian induction, pelvic inflammatory disease, IUCD can help in early diagnosis and successful treatment of the condition with decrease in the associated morbidity.

CASE REPORT
25 year old Mrs. XX married for 8 months and having regular menstrual cycles, presented with a history of 7 weeks and 4 days amenorrhoea after taking clomiphene citrate for ovulation induction. There was intermittent lower abdominal pain for 2 weeks and passage of dark stained discharge. Her pulse was 82 beats/minute, blood pressure 110/170 mmHg, temperature 99.6°F and respiratory rate of 20 breath/minute. CNS and respiratory system were clinically normal. The abdomen was soft and non tender. On vaginal examination the uterus was bulky, and soft, the internal os closed with no cervical excitation pain. There was no evidence of any adnexital mass.

Three ultrasound at 5 weeks, and 7 weeks at different centers showed a single intrauterine viable pregnancy. In view of these she was diagnosed as a threatened abortion and was treated conservatively. After 3 days she suddenly started lower abdominal pain which increased in intensity and radiated to the right shoulder as well as an increased brownish discharge. Immediate ultrasound was arranged which showed single intrauterine viable pregnancy corresponding to 8 weeks and simultaneous ectopic gestational sac in the left adnexal area with a viable 8 weeks pregnancy.

She was given injection of progesterone Depo (inj. Gravibinon 2 ml 1/M) to support the intrauterine pregnancy and emergency laparotomy was planned. Her Hb was 9.5 gm% and clotting profile was normal 2 pints of fresh blood cross matched. On laparotomy, the peritoneal cavity was filled with more than 500 cc fresh blood clots and there was a cystic mass of 4x4 cms in the ampullary region of left fallopian tube. A left partial salpingectomy was carried out. Uterus was of 8 week gestation. I pint blood administered during operation Histopathology confirmed the presence of tubal gestation with chorionic villi and trophoblastic cells in the fallopian tube.
The post operative period was uneventful. Regular antenatal visits were carried out. At 25 weeks of gestation IUGR was noticed both clinically and on ultrasound with reduced liquor. Fetal demise occur at 28 weeks of gestation. A macerated male fetus of 1lb-10z delivered with no obvious congenital abnormality. The placenta weight was one lb. Anticardiolium antibodies, fasting serum insulin & OGT were normal. She conceived spontaneously within a year and was carefully monitored but had to undergo an emergency caesarean section at 35 weeks of gestation for decreased fetal movement and decreased liquor. Two doses of 12 mg Dexamethasone were given 12 hourly preoperatively. A male baby of 2.2 kg delivered, managed in NCU for pre-maturity, and associated problems.

Both baby and mother were discharged after 10 days in good health.

DISCUSSION:
Heterotopic pregnancy is the presence of simultaneous intrauterine and ectopic pregnancy. It is a rare presentation and can be missed if a high index of suspicion is not present. Clinical examination arter careful history is helpful while ultrasound is diagnostic. In our case 3 early ultrasounds were unremarkable and misleading. Lower abdominal pain along with brownish discharge with an intact intrauterine pregnancy should alert the sonologist to look for adnexal pathology i.e. possible ectopic. Serial ultrasounds in such situation are helpful to rule out tubal ectopic. Ultrasound has a definitive role in the diagnosis of such pregnancy but that are certain pitfalls. Firstly, the intrauterine fluid sometimes found in ectopic gestation can be misinterpreted as a true sac. A true gestational sac exhibits a double decidual sac sign, which is an echogenic ring surrounding the sac. Also decidualization of endometrium can be seen as a pseudo gestational sac. This is helpful to rule out tubal ectopic. Heterotopic pregnancy is believed to result from implantation of dizygotic twins at widely separated sites. Thus, on ectopic pregnancy rate of 3 - 5% a multiple pregnancy rate of 10 - 20% and a heterotopic pregnancy rate of 1% are seen in gonadotrophin treated women. Thus, clinicians and sonologists should consider concomitant tubal pregnancy in IVF or gonadotrophic treated cases.

Our patient under went an emergency Laparotomy. Conservative treatment in chronic unruptured ectopics in another option. If the extrauterine gestation sac is intact and there is no intraperitoneal haemorrhage low dose methotrexate can be used locally without affecting co-existing intrauterine pregnancy. As early removal of an ectopic pregnancy can alter and affect the early placentation of intrauterine pregnancy. Human chorionic gonadotrophins might have been a better option as increase progesterone in normal patient can decrease HCG of Placenta and impaired placentation which can later result in early abortion hypertension fetal intrauterine growth restriction and even fetal death.

50% of previous ectopic pregnancies are followed by a spontaneous intrauterine pregnancy but these have an increased incidence of ectopic so one have a high index of suspicion in dealing with such pregnancies. A careful history, clinical examination, HCG levels and sonographic examination is the key to success in high risk fetuses with a better fetal and maternal outcome. With early diagnosis and careful management the ectopic pregnancy can be safely removed before rupture and the intrauterine pregnancy can be allowed to a successful outcomes.

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