

Heterotopic pregnancy of a ruptured ectopic pregnancy coexisting with a twin intra-uterine pregnancy: A case report

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Summary

A case of ruptured ectopic and twin intra-uterine pregnancy is presented. The patient had conceived following ovulation induction with clomiphene citrate.

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Introduction

Spontaneous heterotopic pregnancies are rare with an incidence of one in 30 000.¹⁻⁴ Numerous cases of heterotopic pregnancies have been reported in the last 10 years. Most of the reported cases followed ovulation induction with clomiphene citrate.^{8,10-14}

The risk of an ectopic pregnancy is higher in pregnancies following assisted reproduction than in pregnancies from natural conceptions.^{9,10} The risks are increased by 65% in regimens involving clomiphene citrate.⁹ Clomiphene citrate is also associated with a 10% risk of multiple pregnancies.⁵

Case Report

A 32 year old *para* one *gravida* two school teacher presented to the Accident and Emergency unit with a one day history of sudden onset of severe abdominal pain associated with abdominal distension and shoulder tip pain worsened by a head tilt. The symptoms followed two months of amenorrhoea. A urine pregnancy test done two weeks prior to admission was positive. Nausea and vomiting had been excessive from the time she thought she was pregnant. She had a normal vaginal delivery in 1997. Her menstrual cycles had been regular, menstruating four days in every 28 days. There was no history of multiple pregnancy in her own or her husband's family.

She stopped using *ovrette* an oral progesterone only contraceptive pill in June, 1998 to plan for another pregnancy. Laparoscope dye studies done in June, 1999, showed both her fallopian tubes to be patent. She did not know the exact details of the laparoscopic examination findings. Nine months later she was started on clomiphene citrate 100mg per day for five days taking the first tablet on

the second day of each menstrual cycle. She conceived after one treatment course.

On examination she looked unwell with marked pallor; her blood pressure was 100/70mmHg. The abdomen was distended, tender with muscle guarding. Vaginal examination revealed a bulky uterus, tender adnexae and cervical excitation tenderness. A diagnosis of ruptured ectopic pregnancy was made. The haemoglobin was 5g/dl. After the initial resuscitation with Ringers lactate solution she was taken to theatre for laparotomy. She was transfused four units of packed cells intra-operatively. A ruptured tubal pregnancy on the interstitial part of the fallopian tube was found with two litres of blood present in the peritoneal cavity. A left salpingectomy was performed with preservation of both ovaries. The post operative period was uneventful leading to her full recovery and discharge home on the fifth day. The histology results confirmed a tubal ectopic pregnancy.

At a follow up visit two weeks after the operation, she remarked that the symptoms of pregnancy were still present. Nausea and vomiting had got worse. Her bowels had opened and the abdomen was not distending. Normal bowel sounds were heard in the abdomen on auscultation. In view of the persistent symptoms of a pregnancy an ultrasound scan was ordered. A viable twin intra-uterine pregnancy of nine weeks four days measured by crown-rump length was detected. The size of the foetus corresponded to the gestation by her dates. A repeat ultrasound scan done at 19 weeks gestation confirmed the twin intra-uterine pregnancy. She had five antenatal visits which were uneventful. At 32 weeks gestation she was admitted in active labour. After six hours she delivered live male and female babies weighing 1 100gms and 1 050gms respectively.

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Discussion

The patient presented with a heterotopic pregnancy of an ectopic and twin intra-uterine pregnancy. The diagnosis of the ectopic pregnancy was made on clinical grounds whilst the intra-uterine pregnancy was diagnosed retrospectively. Heterotopic pregnancies are often diagnosed retrospectively.¹⁴ Vaginal ultrasonography and laparoscopy can be used to diagnose heterotopic pregnancy.^{6,14} The clinical presentation of heterotopic pregnancies can be atypical and an ultrasound scan falsely reassuring as was the case in the patient reported by de Muylder.⁸

In the heterotopic pregnancies associated with clomiphene citrate reported in the literature, the intrauterine pregnancies had a single foetus.^{8,11-12} None of these pregnancies had a twin intra-uterine gestation. The patient presented may be the first where the intra-uterine pregnancy had a twin gestation. In a Medline literature review conducted in English, French and Spanish using a database of 1993 to December 2000, no case similar to the one presented was found.

Conclusion

An unusual case of heterotopic pregnancy is presented; the heterotopic pregnancy presumably being caused by the use of clomiphene citrate an ovulation inducing agent.

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