

# Spontaneous heterotopic pregnancy: a successful outcome

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## Summary

Spontaneous heterotopic pregnancy is rare condition. We are reporting a case where the ectopic component was treated successfully laparoscopically and the intrauterine pregnancy continued to term uneventfully.

**Key words:** Heterotopic pregnancy; Outcome; Management.

## Introduction

Spontaneous heterotopic pregnancy is a rare condition and used to be a common cause of maternal mortality due to the ectopic component. Today, however, with the marked improvement in technology (e.g., ultrasound imaging and new and accurate quantitative and qualitative tests of  $\beta$ -hCG) and early intervention, ectopic pregnancy is virtually diagnosed and treated before it becomes a risk to the life of the mother.

We present a rare case of spontaneous heterotopic pregnancy where the ectopic element was treated successfully by laparoscopy while the intrauterine pregnancy continued successfully to term.

## Case Report

A 36-year-old woman presented to the early pregnancy assessment unit when she was nine weeks pregnant in her first pregnancy complaining of lower abdominal pain for one week and brownish vaginal discharge for 24 hours. She had no past medical or surgical problems. She became pregnant two years after stopping combined oral contraceptive pills without any fertility treatment.

General examination was unremarkable. However, there was diffuse lower abdominal tenderness with no rigidity or guarding. Pelvic examination revealed minimal brownish vaginal discharge, positive cervical excitation and bilateral adnexal tenderness. Transvaginal scan showed two gestational sacs, one intrauterine and the other one in the left adnexum together with free fluid in the Pouch of Douglas. A fetal pole with cardiac activity was identified in both sacs. The case was diagnosed as a heterotopic pregnancy. Emergency laparoscopy was performed which showed a ruptured left-sided ectopic pregnancy with haemoperitoneum. Laparoscopic left salpingectomy was performed using unipolar diathermy and scissors without the use of any intrauterine instrumentation. The patient made a good recovery. She was discharged home on the following day and arrangements were made for follow-up in the antenatal clinic. She had an uncomplicated pregnancy and was delivered by elective caesarean section at term because of breech presentation.

## Discussion

Ectopic pregnancy used to be a common cause of maternal mortality. However, because of the marked advancement in ultrasound imaging and the development of accurate quantitative and qualitative tests of  $\beta$ -hCG, ectopic pregnancy is currently mostly diagnosed early and treated before it can pose a significant risk to the life of the mother. The incidence of ectopic pregnancy in the UK has risen from 4.9/1,000 pregnancies in 1970 to 11.1/1,000 pregnancies in 2000 and has remained static since then [1]. The often quoted incidence of heterotopic pregnancy was 1 in 30,000 pregnancies (the figure was obtained from an old observation of the incidence of ectopic pregnancy and dizygotic twinning). Currently the same calculation yields an estimated incidence between 1/4,000 to 1/7,000 [2].

Risk factors for the development of heterotopic pregnancy are the same as for ectopic pregnancy [3]. The main factor implicated is unrecognised tubal damage from pelvic inflammatory disease in early reproductive life. Other factors like ovulation induction, IVF, use of intrauterine contraceptive devices, pelvic or tubal surgery can increase the risk between two and seven times according to some estimates [3].

The chances of having a viable intrauterine pregnancy however are good provided that the cases are diagnosed early and managed properly [4]. A high index of suspicion, repeated ultrasound examination and early intervention when indicated are mandatory to salvage the viable intrauterine pregnancy and avoid maternal morbidity. The laparoscopic approach to the surgical management of tubal pregnancy in haemodynamically stable patients is associated with shorter hospital stay, less intraoperative blood loss, lower analgesic requirements, similar subsequent intrauterine pregnancy rates and lower repeat ectopic pregnancy rates compared to laparotomy [5-7]. The current case is an example of a spontaneous heterotopic pregnancy, without any underlying risk factors, which makes it a rare case. The ectopic element was managed laparoscopically and had a successful outcome.

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