



Case report

Laparoscopic resection of cornual heterotopic pregnancy after *in vitro* fertilization and embryo transfer leading to successful live birthFreda Khoo^a, Tse Yeun Tan^b, Heng Hao Tan^{b,*}^a Department of General Obstetrics and Gynaecology, Kandang Kerbau Women's and Children's Hospital, Singapore^b Department of Reproductive Medicine, Kandang Kerbau Women's and Children's Hospital, Singapore

ARTICLE INFO

Article history:

Received 17 January 2014

Received in revised form

10 March 2014

Accepted 2 May 2014

Available online 11 November 2014

Keywords:

cornual ectopic
heterotopic pregnancy
IVF pregnancy
wedge resection

ABSTRACT

Heterotopic cornual pregnancy refers to the co-existence of intrauterine and extrauterine cornual pregnancies. This is rare, but the incidence increases in pregnancies associated with *in vitro* fertilization and embryo transfer (IVF-ET). A 36 year old gravida 2 para 0 woman with a history of bilateral salpingectomy underwent IVF-ET and was diagnosed with a heterotopic cornual pregnancy. She underwent diagnostic laparoscopy and wedge resection of the right cornual ectopic pregnancy. The intrauterine pregnancy progressed uneventfully and was delivered via caesarean section at 36 + 6 weeks. This case report illustrates the importance of early diagnosis of the condition, and how meticulous surgical technique is effective in removing the cornual ectopic pregnancy while preserving the intrauterine pregnancy.

Copyright © 2014, The Asia-Pacific Association for Gynecologic Endoscopy and Minimally Invasive Therapy. Published by Elsevier Taiwan LLC. All rights reserved.

Introduction

Heterotopic pregnancy refers to the coexistence of intrauterine and extrauterine pregnancies. The incidence of heterotopic pregnancy ranges from 1:7963 to 1:30,000 natural pregnancies. However, the incidence increases to 1:100 in pregnancies associated with *in vitro* fertilization and embryo transfer (IVF-ET). There may also be other predisposing factors in these gestations that increase the chance of heterotopic pregnancies, such as previously damaged tubes.

The clinical picture proves to be even more challenging in cornual ectopic pregnancies. Its incidence is estimated to be 1:3600 in pregnancies associated with IVF-ET. Early diagnosis is essential but difficult in cornual pregnancies, and significant hemorrhage as well as rupture can result if diagnosed late. The Eighth Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom 2006–2008, reported that six deaths occurred due to ruptured ectopics, and most of them were due to late diagnosis.

We present a case report of a woman who underwent a successful laparoscopic resection of a heterotopic cornual pregnancy that developed after IVF-ET, leading ultimately to the birth of a healthy baby boy.

Case report

A 36-year-old Chinese woman, gravida 2 para 0, had a known history of bilateral hydrosalpinges. She conceived naturally but it resulted in a left ectopic pregnancy, for which she underwent bilateral salpingectomy. After this treatment, she underwent IVF-ET to conceive again. She had two embryos transferred during the procedure.

At a routine follow-up on Day 31 after IVF-ET, ultrasound showed a heterotopic pregnancy, with two gestational sacs and two fetal hearts. Twin A was an intrauterine pregnancy and had a crown–rump length of 52 mm. Twin B was a right cornual pregnancy, with a crown–rump length of 32 mm. There was no sign of any intra-abdominal free fluid.

The patient was stable and asymptomatic upon ultrasound diagnosis. However, she developed sudden onset of lower abdominal pain half a day later. The intensity of the pain increased rapidly. The patient became pale. The blood pressure was 90/50 mmHg and pulse rate was 88 beats/minute. The abdomen was slightly distended, with lower abdominal tenderness, as well as guarding and rebound tenderness.

The decision was made for emergent diagnostic laparoscopy with a view to proceed to wedge resection of the right cornual pregnancy. Informed consent was taken. A four-port laparoscopy was performed. Intraoperatively, a 3 cm partially ruptured right cornual ectopic pregnancy was seen (Fig. 1). Both fallopian tubes were absent due to previous salpingectomies. The left ovary was

Conflicts of interest: All authors declare no conflicts of interest.

* Corresponding author. Department of Reproductive Medicine, Kandang Kerbau Women's and Children's Hospital, 100 Bukit Timah Road, 229899 Singapore.

E-mail address: tan.heng.hao@kkh.com.sg (H.H. Tan).

<http://dx.doi.org/10.1016/j.gmit.2014.08.002>

2213-3070/Copyright © 2014, The Asia-Pacific Association for Gynecologic Endoscopy and Minimally Invasive Therapy. Published by Elsevier Taiwan LLC. All rights reserved.

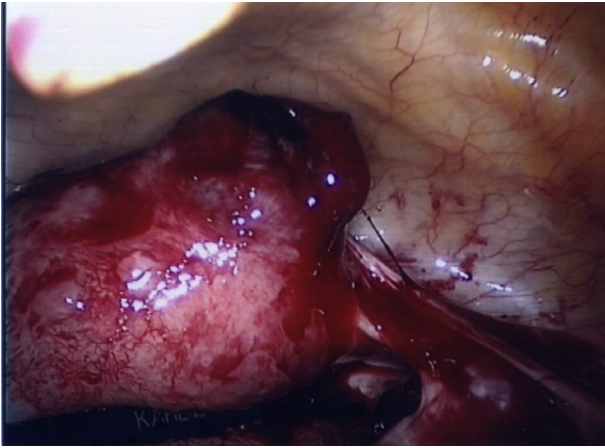


Fig. 1. Ruptured right cornual ectopic pregnancy with active bleeding.

normal. There were 5 L of hemoperitoneum with active bleeding. A wedge resection of the right cornual ectopic pregnancy was performed (Fig. 2). Instruments used were the Richard Wolf Bipolar Coagulating Forceps 3-mm Blade and Ethicon Endo-Surgery Endopath 5-mm Curved Scissors. The pregnancy bed was diathermised with short pulses of energy. The uterine defect was repaired in two layers with monocryl suture (Fig. 3). There was no uterine manipulation intraoperatively. Hemostasis was successfully secured.

The skin-to-skin operating time was 70 minutes. In total, 1500 mL of crystalloids (Ringer's lactate), 500 mL of colloids (Voluven), and one unit of packed red cells were infused. There were no intra- or postoperative complications. An ultrasound scan on the 1st postoperative day revealed a positive fetal heart in the intrauterine gestational sac. The patient was discharged home on the 3rd postoperative day. The pathological report of the surgical specimen concurred with the diagnosis.

The rest of the pregnancy proceeded uneventfully. Antenatal ultrasound scans were unremarkable and there was no antenatal finding of uterine dehiscence. An elective cesarean delivery was planned at 37 + 3 weeks of gestation. However, the woman went into labor at 36 + 6 weeks and underwent an emergency cesarean delivery. Intraoperatively, the right cornual edge was noted to be thinned out and bulging, and a defect of about 2 cm in diameter was felt in the myometrium (Fig. 4). The defect was repaired in two layers with monocryl suture (Fig. 5).

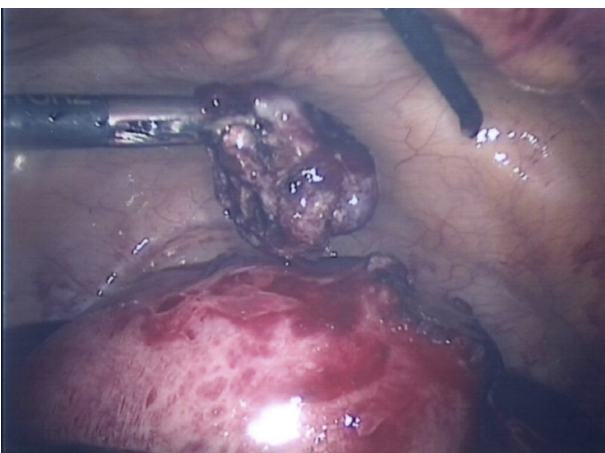


Fig. 2. Right cornual ectopic pregnancy resected.

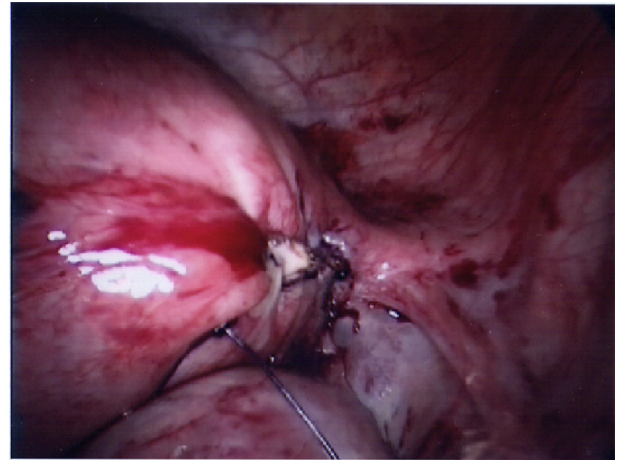


Fig. 3. Uterine defect repaired with two-layer closure.

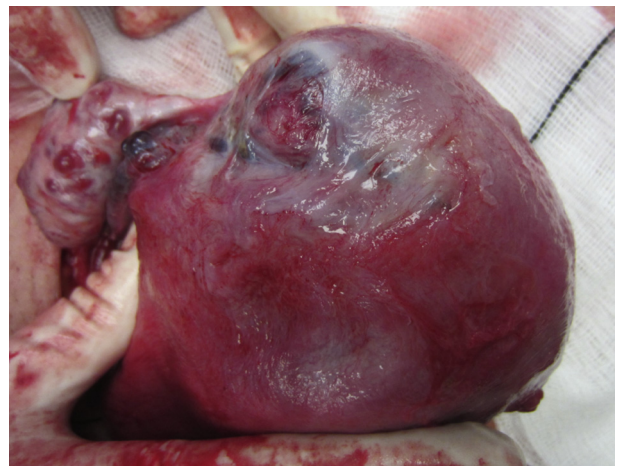


Fig. 4. Bulging defect at cornual edge noted at cesarean delivery.

A healthy baby boy weighing 2784 g was delivered, with Apgar scores of 9 and 9. The mother had an uneventful *postpartum* course and was discharged with her infant after 3 days.

Discussion

The risk factors of heterotopic pregnancy in IVF-ET are an increased number of transferred embryos, excessive pressure on



Fig. 5. Uterine defect repaired with two-layer closure after cesarean delivery.

Download English Version:

<https://daneshyari.com/en/article/3951345>

Download Persian Version:

<https://daneshyari.com/article/3951345>

[Daneshyari.com](https://daneshyari.com)