

Case Report

CORNIAL TWIN ECTOPIC PREGNANCY: A CASE REPORT

ABSTRACT

Aims: To highlight a rare occurrence of twin ectopic gestation in a rare position of the uterine cornua.

Presentation of case: A 22 years old Para0+1, who presented with ten hours history of sudden onset of lower abdominal pains, abdominal distension, dizziness and weakness following thirteen weeks amenorrhea. She has had a previous history of right partial salpingectomy for ruptured ectopic gestation. She had a repeat laparotomy and right-sided wedge resection for ruptured cornual ectopic pregnancy. Two fetuses and the placenta were removed from the peritoneal cavity.

Discussion: Twin ectopic gestation is rare, so also is cornual ectopic gestation. Any of these could result in a maternal death if ruptured. This patient had both conditions on the ipsilateral side of a previous ectopic pregnancy, but survived because of immediate intervention with laparotomy and cornual resection of the affected site. The twin ectopic fetuses are males and likely a monozygotic twin.

Conclusion: Previous partial salpingectomy can predispose to a repeat ectopic in the ipsilateral side.

*Keywords: Cornual Ectopic
Twin Ectopic
Cornual Resection
Ruptured Ectopic*

1. INTRODUCTION

Ectopic pregnancy is an important direct cause of maternal death [1]. Cornual ectopic pregnancy is rare but about the most hazardous form of ectopic pregnancy. It accounts for 2-6% of all ectopic pregnancies with an incidence of 1 per 2500-5000 live births[1]. It occurs when the fertilized egg implants in that part of the fallopian tube buried in the wall of the uterus. With the presence of abundant myometrium, cornual pregnancies are more difficult to diagnose, as they appear to be in the uterus on ultrasonography. Also due to myometrial distension, they tend to rupture later than other types of ectopic pregnancies with potentially devastating haemorrhage[1]. We report an unusual case of a recurrent contra lateral 13-weeks ruptured cornual twin ectopic pregnancy.

2. PRESENTATION OF CASE

Miss AJ is a 22year old lady, Para0+1, presented to the accident and emergency department of the University of Port Harcourt Teaching Hospital (UPTH) with a ten-hour history of sudden onset of lower abdominal pain, abdominal distension and weakness, dizziness and sudden collapse following a thirteen weeks amenorrhea. There was no history of trauma to the abdomen.

She attained menarche at 15 years. She has a regular monthly 4 days menses. She was not on any contraception even though she did not want the pregnancy. She had laparotomy and left salpingectomy for ruptured ectopic gestation 8months prior to this event. She had no other significant past medical history. She is unmarried but resides with her fiancée. Miss AJ has no family history of

hypertension or diabetes mellitus. She takes alcohol occasionally but does not take tobacco or other addictive substances.

Physical examination at presentation showed an anxious lady, pale and sweaty. Her respiratory rate was 24 cycles per minute and her breath sounds were normal. Her pulse rate was 120 beats per minute, her blood pressure was 90/60mmHg and her heart sounds were normal.

Her abdomen was distended with a midline sub-umbilical scar. There was generalized abdominal tenderness with guarding and positive fluid thrill.

The vulva, vagina and the cervix appeared normal on pelvic examination. The uterus was difficult to delineate due to tenderness. The fornixes were bulging and tender. The diagnosis of ruptured ectopic gestation was made. Her pelvic ultrasonography showed an enlarged empty uterus with marked free peritoneal fluid. Her pregnancy test was positive. Her pack cell volume was 20% and two units of compatible blood were made available for use during surgery. She and her spouse were informed of the findings and diagnosis. The need for an emergency repeat laparotomy was communicated to them and they gave consent for the surgery. Prior to surgery she received 2liters of normal saline, 30mg of pentazocine and 25mg of promethazine. Findings at laparotomy were 1.5liters of haemoperitoneum, ruptured right cornual pregnancy, bilateral normal ovaries and absent left fallopian tube. Two male fetuses and the placenta were found in the pelvic cavity. A right-sided wedge resection of her uterus excising the site of the ectopic pregnancy was carried out. The resected portion of the uterus was apposed together with vicryl 1 suture material and hemorrhage controlled. The abdominal cavity was closed with vicryl 2 to the rectus sheath and nylon 2/0 to skin. She received the two units of blood transfused intra-operatively. She was discharged home 5 days later in a stable clinical condition after a discussion on the event and outcome of the surgery. Her follow up six weeks later showed she was in good health. She was referred to a fertility clinic for invitro- fertilization and embryo transfer in a future date.

3. DISCUSSION

As demonstrated in this case, a previous history of ectopic pregnancy with salpingectomy remains a strong risk factor for repeat ectopic pregnancy. Other risk factors include pelvic inflammatory disease, congenital defects of the fallopian tubes, history of infertility, assisted reproductive treatment (ART), use of intra-uterine contraceptive device and the exposure to diethyl stilbesterol in-utero.^{3,4}

The history of sudden onset of lower abdominal pain, progressive weakness and abdominal swelling following 13 weeks amenorrhea in this patient with previous ectopic pregnancy aroused a clinical suspicion of another ruptured ectopic pregnancy. She presented from the referral hospital in hemodynamic shock with haemoperitoneum left no other option than prompt resuscitation with intravenous fluids and emergency laparotomy where the definitive diagnosis was made and the hemorrhage arrested. The ectopic gestation involved the right fallopian tube where partial salpingectomy was done for the previous ectopic pregnancy about eight months ago. This shows that previous salpingectomy may not prevent a repeat ipsilateral ectopic gestation. It is possible that a recanalization of the tube after salpingectomy may have occurred or more rarely a retrograde uterotubal migration of the embryo in to the cornual of the ipsilateral tube of the previous ectopic pregnancy. Early ultrasound diagnosis of cornual ectopic may be possible with the identification of the interstitial line, this however does not entirely eliminate the confusion at ultrasonography between a normal intrauterine pregnancy and a cornual pregnancy.^{5,6} Also, the concept of the discriminatory zone using serum levels of human chorionic gonadotropin to identify an ectopic pregnancy introduced by Kader and his Colleagues in 1987 may be misleading in cornual ectopic pregnancies especially in this case with twin fetuses.

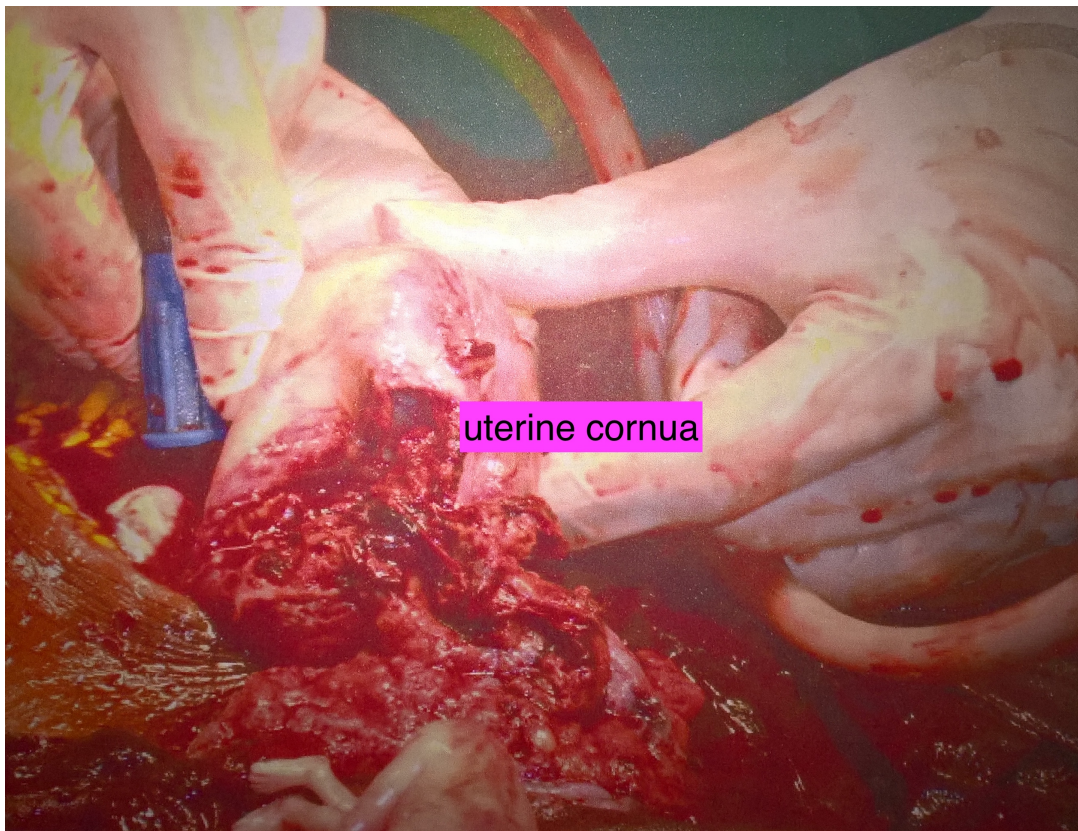
Cornual pregnancy with its closeness to both the uterine and ovarian vessels, pose a high surgical risk with the potential for massive intra peritoneal bleeding. Miss A.J was treated with cornual wedge resection, which controlled the bleeding. Cornual wedge resection or hysterectomy in cases of uncontrollable hemorrhage has been the traditional treatment options for a ruptured cornual ectopic gestation. An ipsilateral uterine artery ligation before cornual resection and repair has been recommended by some authors to reduce hemorrhage in ruptured cornual/interstitial ectopic pregnancy.^{5,8} Minimally invasive techniques like laparoscopic cornual resection, cornuostomy, salpingostomy salpingectomy, uterine artery embolization, combined hysteroscopic and laparoscopic and ultrasound guided techniques have all been used in selected cases.^{1,9,10,11} Medical management with intramuscular methotrexate adopting strict criteria for medical management of ectopic pregnancy has been employed in some conservative management of cornual ectopic pregnancy with good results.^{12,13} These management options however, are not popular in our settings now for two main reasons. The first is that majority of our patients present late in haemodynamic shock from

catastrophic hemorrhage from the ruptured ectopic pregnancy and the other is the lack of equipment and trained manpower for minimally invasive surgery.

There is the possibility of a future pregnancy in this patient. However, effort must be made to rule out another ectopic pregnancy. Caesarean delivery is recommended if she does conceive an intrauterine pregnancy due to concern for uterine rupture secondary to weakness in the myometrium at the site of the last ectopic pregnancy.

4. CONCLUSION

Cornual pregnancy is a rare and hazardous variety of ectopic pregnancy. A cornual twin ectopic is even more rare, as just a single case of cornual twin ectopic pregnancy has been reported in literature. As seen in this case, the diagnosis and treatment are often challenging and commonly constitute medical emergencies. The serious consequences of cornual ectopic are the catastrophic hemorrhage and even maternal death when it ruptures.



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