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Quick Response Code:	Website: www.annalsafrmed.org
	DOI: 10.4103/1596-3519.93535

Bilateral tubal ectopic pregnancies: A report of two cases

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Abstract

Bilateral tubal ectopic pregnancies are rare occurrences. Two recently managed cases are discussed. The first was a single, sexually active 23-year-old nullipara with family history of twinning who presented with eight weeks amenorrhea, positive pregnancy test, lower abdominal discomfort and other clinical and ultrasound findings suggestive of unruptured left tubal pregnancy. Intra-operatively, unruptured bilateral tubal pregnancies were found and bilateral salpingotomy performed with uneventful recovery. Histology of the specimens confirmed the intra-operative diagnosis. She was appropriately counseled. Case 2, a 30-year-old multiparous housewife who had been on clomid for secondary infertility, presented with signs and symptoms of ruptured tubal ectopic. Intra-operatively, ruptured left and unruptured right tubal pregnancies were found and salpingectomy and salpingotomy were done respectively, with uneventful recovery. The diagnosis was also confirmed histologically and counseling given as in case 1. Bilateral tubal ectopic pregnancies appear to be increasing with twin proneness and use of fertility drugs as risk factors. Whether spontaneous or induced, the hallmarks of good management include early presentation, high index of suspicion, meticulous ultrasound scanning, good case selection, judicious intra-operative inspection of the contralateral tube, histology of specimens and appropriate patient counseling.

Keywords: Bilateral, induced, salpingectomy, spontaneous, tubal ectopic

Résumé

Les grossesses ectopiques tubaires bilatérales sont rares occurrences. Deux cas récemment aménagées sont discutées. Le premier était un unique, sexuellement actif 23-year-old nullipara avec des antécédents familiaux de jumelage qui a présenté avec l'aménorrhée de huit semaines, test de grossesse positif, gêne abdominale inférieure et d'autres résultats cliniques et les ultrasons évocateurs d'une grossesse tubaire gauche non rompue. Préopératoires, non rompue grossesse tubaire bilatérales ont été trouvés et bilatéral salpingostomie effectué avec récupération sans incident. Histologie des spécimens a confirmé le diagnostic peropératoire. Elle a été correctement conseillée. Cas 2, une ménagère Multipare âgé de 30 ans, qui avait été sur Fertinorm pour l'infertilité secondaire, a présenté des signes et des symptômes de rupture tubaire ectopiques. Préopératoires, rupture des grossesses tubaires droite gauche et non rompues ont été trouvés et les salpingectomie et salpingostomie ont été respectivement, avec récupération sans incident. Le diagnostic a été également confirmé histologiquement et de counselling étant donné que dans le cas 1. Les grossesses ectopiques tubaires bilatérales semblent s'accroître avec la tendance twin et l'utilisation des médicaments de la fécondité comme facteurs de risque. Si spontané ou provoqué, les caractéristiques de la bonne gestion incluent présentation précoce, indice élevé des soupçons, méticuleux échographie, bonne sélection des cas, inspection peropératoire judicieuse du tube contralatéral, histologie de spécimens et patient approprié de consultation.

Mots clés: Bilatérale, induit, salpingectomie, spontanée, tubaire ectopiques

Introduction

Twin ectopic pregnancies are rare occurrences, but have been reported with increasing frequency in recent times.^[1] The predisposing factors for occurrence of ectopic pregnancy include early age of sexual intercourse, increased maternal age, multiple sexual partners, pelvic infections, history of infertility, use of fertility drugs, previous ectopic pregnancies and previous pelvic surgeries.^[2] Twin ectopic pregnancies may involve one tube^[3,4] or both tubes. The clinical presentation varies from incidental discovery to acute emergency and management depends on factors such as the condition of the affected tube(s), the patient's parity and reproductive aspirations, the experience of the surgical team and the available resources.

This article presents two recently managed cases of twin ectopic pregnancies with bilateral tubal involvement and reviews the literature on the subject.

We obtained permission from the patients to publish this report with the pictures anonymously and ethical approval was granted by the Ethics Committee of the hospitals.

Case Reports

Case 1

A 23-year-old nulliparous Igbo undergraduate, whose last menstrual period was on 18/7/2006, was first seen on 17/9/2006 with complaints of lower abdominal discomfort for about 6 h, spotting of blood per vaginam for four days and weakness and dizziness for two weeks. She was well until three weeks to presentation when she had positive pregnancy test after missing her monthly menstrual period. She considered a termination, but could

not for lack of money. Subsequently, she developed weakness, dizziness and blood spotting per vaginam. On the day of presentation, she had mild lower abdominal discomfort. She did not have fainting spells. She was nulliparous and just had her traditional marriage about five months prior to presentation. She was sexually active and only used the condom occasionally. There was no past history of termination of pregnancy, sexually transmitted disease and use of fertility enhancing drugs. Her sister had a set of twins. There was nothing else of significance in her history.

On examination, she was neither pale nor jaundiced, her vital signs were normal and abdominal examination did not reveal any abnormality. Her vulva was blood-stained, the cervix looked healthy and there was no active bleeding through the cervical os. The uterus was bulky and the adnexa were full, with the fullness more marked on the left than the right. There was no pelvic tenderness or evidence of fluid in the pouch of Douglas (POD). Pelvic ultrasound scan revealed a left adnexal mass that was 52 mm in diameter and had mixed echogenicity, an enlarged and empty uterus, and minimal peritoneal fluid. The findings led to a diagnosis of unruptured left tubal ectopic pregnancy and the patient was counselled on the need for immediate surgical intervention to forestall rupture, and she consented. Laboratory tests confirmed that she was fit for surgery.

At laparotomy, the ampulla of the left fallopian tube was distended to about 8 cm by 5 cm [Figure 1] and fresh blood was dripping from the fimbrial end. The ampulla of the right tube was also distended to about 5 cm by 3 cm [Figure 2], the uterus was bulky, soft and non-cystic, the ovaries looked healthy and contained corpora lutea and there was about 100 ml of blood in the POD. A diagnosis of unruptured bilateral tubal ectopic pregnancies was made.



Figure 1: Unruptured left tube (case 1)



Figure 2: Unruptured right tube (case 1)

The left tube was mobilized and the two ends of the distended segment fixed using atraumatic forceps. Its lumen was entered without cutting the content, via a 3-cm long linear incision on the anti-mesenteric border of the affected segment. The content was gently, though with some difficulty, enucleated, intraluminal hemostasis was achieved by application of very dilute adrenaline solution, and the incision closed with four interrupted vicryl 5-0 sutures. The right fallopian tube was also similarly treated. Tissue handling and blood loss were minimal, and hemostasis good. The POD was suctioned and the abdominal wall closed in layers. The specimens were sent for histological analysis. Her post-operative recovery was smooth. Prior to discharge, she was counseled on the possibility of recurrence of ectopic pregnancy and the need to embrace barrier contraception (the condom) for dual protection, prevention of pregnancies until desired and sexually transmitted infections (STIs), including HIV/AIDS. The likelihood of future reproductive impairment was discussed and the need for follow up was stressed.

At follow up, she was fine. Histological analysis confirmed the specimens to be pregnancies, thus confirming the diagnosis of unruptured bilateral tubal ectopic pregnancies. She was subsequently lost to follow up on account of relocation to join her husband.

Case 2

A 30-year-old housewife, who lived with her husband, a trader, at Mgbo, near Abakaliki, was admitted through the gynecological emergency unit on 23/12/2007 with complaints of lower abdominal pain of 4 h duration, dizziness for 2 h and fainting attacks which started 30 min prior to presentation. The pain was sudden in onset, sharp and severe, aggravated by body movements and radiated to her left shoulder. She also had dizziness, palpitation and tachypnea, all in quick succession. She did not have fever or vomiting, and did not sustain any injury from the fainting episodes. Her other systems were normal.

She was para 3⁺⁰ with two living children, one male and one female. Her last confinement was in 1997, 10 years prior to presentation. Since then, she had been unable to conceive and for six months prior to her last menstrual period which was on 26/10/2007, had been receiving clomid from a peripheral hospital for the treatment of secondary infertility. She did not do pregnancy test after the missed period. She did not use contraception in the past and there was no past history of multiple sexual partners or STIs.

On examination, she was in painful distress and

had severe pallor, with cold clammy extremities, but was not febrile or jaundiced. Her radial pulse was not palpable, the blood pressure was 60/0 mmHg and her heart rate was 135 beats per minute. She was tachypneic with poor respiratory excursion, but her chest was clinically clear. Her abdomen was distended, did not move with respiration and was tender all over. Peritoneal tap yielded non-clotting blood. Her vulva was blood-stained. Gentle speculum examination showed a bulging posterior vaginal fornix and blood trickling from the cervical os. She had severe pelvic tenderness that made digital examination impossible. A diagnosis of ruptured ectopic pregnancy with hypovolemic shock was made. Resuscitation with fluids, analgesics and antibiotics was commenced and investigations were done. Counseling was done as in case 1 and she consented to emergency surgery.

Intraoperative findings were massive hemoperitoneum (greater than 2 l of blood), ruptured left tubal ectopic pregnancy, unruptured right tubal ectopic pregnancy, a bulky uterus and healthy looking ovaries. A diagnosis of bilateral tubal ectopic pregnancies with ruptured left tube and severe hemoperitoneum, was made. Left salpingectomy was done, hemoperitoneum evacuated and right linear salpingotomy performed. Peritoneal lavage was done with warm normal saline and the abdomen closed in layers. Two units of blood were transfused and her immediate postoperative state was good. The specimens were sent for histopathological examination.

Postoperatively, she was stable and her subsequent recovery was uneventful. The packed cell volume (PCV) was 22% on the third day and her clinical state remained good all through. Her sutures were removed on the 7th day and the wound union was good. Repeat PCV was 24%. She was counseled on the possibility of future reproductive impairment and recurrence, stressing the need for contraception and thorough assessment prior to embarking on ovulation enhancing medication, and other available options such as adoption, that could assist her in having more babies. She was then discharged on hematinics. At follow up four weeks later, her menses had returned, her clinical state was good and her PCV was 29%. Histopathology reported the specimens as pregnancies and identified evidence of inflammatory reaction in the left tubal segment, thus confirming our diagnosis. So she was counseled and referred to the infertility clinic for continued management.

Discussion

Bilateral tubal ectopic pregnancies are a rare

gynecological condition with great potentials for causing maternal mortality and morbidity. Its true incidence is not known, but because it has been reported with increasing frequency in recent times, may be on the increase. Risk factors include the presence of predisposing factors to ectopic pregnancy, the twin proneness of the people^[1] and use of fertility enhancing medication.^[2] The Igbos of Nigeria with a comparatively high twinning rate,^[5] may have a higher tendency to having twin ectopic pregnancies than some other ethnic groups in Nigeria and the world over and this may be made worse by increasing use of fertility enhancing drugs and assisted reproduction.

Bilateral tubal ectopic pregnancies may be spontaneous, as in case 1 who had a positive family history of twinning, or induced as in case 2 who was receiving ovulation stimulating medication for secondary infertility. Diagnoses depend on a high index of suspicion, very good ultrasound imaging and judicious look at the contralateral tube during surgery on an affected tube,^[1] as done in these cases.

The management of bilateral tubal ectopic pregnancies may be medical or surgical, and depends to a large extent on the state of the fallopian tubes at presentation, the main challenge being to identify and treat as early as possible those cases of ectopic pregnancy with the potential to cause serious morbidity and death, and at the same time minimize interventions in those destined to be resolved without causing any harm.^[2] Medical management was not considered suitable for case 1 who had developed some pelvic hematoma and was contraindicated in case 2 on account of rupture. So, linear salpingotomy was performed on both tubes in case 1 and in case 2, salpingectomy was done on the left tube and linear salpingotomy on the right. Despite our limited experience, salpingotomy is to be preferred when the tubes are intact for it leaves the patients with the hope of future fertility and so prevents the family disintegration associated with childlessness.^[6,7] However, fertility rates reduce following previous ectopics^[2,6,7] and may worsen in the presence of pre-existing infertility as in case 2. Recurrent ectopic pregnancies occur in 6-16% of women with previous history of ectopics^[2] and it has been observed that many

women, for unknown reasons, fail to conceive even after successful reconstructive tubal surgery.^[7,8] Therefore, counseling is very important. There is also need for good case selection to avoid offering conservative surgery to patients less likely to seek proper medical care in future pregnancies only to die unnoticed from recurrent ectopics.^[7]

Ectopic pregnancies pose both health and social challenges to women^[7] and twin ectopics, especially the bilateral tubal type, may worsen these challenges. The risk factors abound in Nigeria and other developing countries and may be worsened by the ability of our women to purchase fertility enhancing drugs over the counter without proper prescription or supervision. Early presentation leaves room for timely diagnosis prior to tubal rupture with institution of management options that encourage tubal conservation and fertility preservation, albeit reduced. Good case selection and meticulous counseling help forestall future social and medicolegal complications.

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Cite this article as: Eze JN, Obuna JA, Ejikeme BN. Bilateral tubal ectopic pregnancies: A report of two cases. *Ann Afr Med* 2012;11:112-5.

Source of Support: Nil, **Conflict of Interest:** None declared.