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Second ipsilateral ectopic gestation after total salpingectomy: a case report

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Summary

A rare case of a second ipsilateral ectopic gestation occurring in the stump of the cornua three years after total salpingectomy for ruptured ectopic pregnancy is presented.

Résumé

Un cas rare dune recondle gestation ipsilaterale ectopique Aarvenant dans le reste des trouges uterines, 3 ans-aqres une coupure, des troupes afen 'd interumpre une grossesse extr-uterine est presenté.

Keywords: *Ectopic, pregnancy, salpingectomy*

Introduction

Ectopic gestation is defined as a gestation in which implantation occurs at a site other than the endometrial lining of the uterine cavity. The fallopian tube is the site in over 95% of cases but other less common sites are the peritoneal cavity, cervix and the ovaries[1]. The past few decades have witnessed a rise in its incidence in diverse communities[2,3]. In the industrialized world, the influence of local variation in contraceptive use, the availability of assisted conception procedures, and improved methods of diagnosis and reporting are responsible for the increased incidence. While in Africa, pelvic infection and septic abortion are also important[3,4].

Other conditions that predispose to ectopic pregnancy include contraceptive failure in women using intrauterine devices, in-utero exposure to diethylstilbestrol and accessory tubal ostia. Also implicated are abnormal peristalsis or dysfunction of the cilia of the oviduct, as well as transmigration of the ovum [1,5]. Other risk factors are previous pelvic surgery or conservative surgery for an ectopic pregnancy, endometriosis involving the endosalpinx, and uterine fibromyomas – particularly in the region of the cornu.

The treatment of ectopic pregnancy can be conservative, with systemic methotrexate or local, with injections of potassium chloride, prostaglandin, or hyperosmolar glucose [6]. Open or laparoscopic salpingostomy or salpingectomy can also be done. However, in the face of tubal rupture, significant anatomic distortion, overt haemorrhage, or if future pregnancies are not desired, salpingectomy may be advisable [7,8].

It is commonly believed that whatever predisposes a patient to one ectopic pregnancy often remains and there is a likelihood of a repeat ectopic gestation. In cases where salpingectomy was previously done, contralateral repeat ectopic gestation has been reported, while repeat ectopic gestation occurring after conservative salpingotomy in the first event has also been described [9].

In this case report, a case of a right cornual gestation occurring three years after a right total salpingectomy for a ruptured tubal gestation is presented.

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Case report

A 32-year old Nigerian woman, Gravida 5, para 2, spontaneous abortion 1, with a previous right-sided ectopic gestation, presented with a right iliac fossa pain of one week duration at a gestational age of eleven weeks. The pain was dull, continuous and was not relieved by analgesics. There was no bleeding or discharge per vagina, no dizziness, or syncopal attacks. There was no previous history of similar pain. She had a right total salpingectomy done three years earlier for a ruptured right tubal gestation. The histology report of the specimen removed at surgery was reported as the fallopian tube containing ectopic gestation. A spontaneous incomplete abortion two years before presentation also necessitated a routine dilatation and curettage. She was not pale or febrile and her vital signs were normal. There was tenderness in the right iliac fossa but no guarding or rebound tenderness. Bowel sounds were normoactive. Pelvic examination revealed a soft cervix with closed cervical os, and the uterus was enlarged to the size of a ten-week intrauterine gestation.

Investigations revealed a positive urine pregnancy test, packed cell volume of 35% and her genotype was AC. Based on a presumptive diagnosis of acute appendicitis in the first trimester of pregnancy, she was admitted onto the ward and commenced on intravenous ceftriaxone 1g. daily, and analgesics.

Ultrasound scan of the pelvis showed a uterus measuring 50 mm in diameter anteroposteriorly and 87 mm in longitudinal section. The endometrium had a menstrual pattern and no gestational sac was evident. There was free fluid in the pouch of Douglas, extending to both adnexa. There was no mass or collection in the right iliac fossa. Laparoscopy could not be carried out as facilities for this were not available to us when the patient presented.

An exploratory laparotomy was subsequently done on the same day. Findings at surgery were: hemoperitoneum of 150 ml, an absent right fallopian tube, and the right ovary was adherent to the uterine fundus. A right cornual ectopic gestation was seen. A right cornual resection and repair was done. She had an uneventful post-operative recovery and was discharged home on the seventh post-operative day.

Discussion

Cornual pregnancies, constituting 2.5%, as well as pregnancy in the rudimentary uterine horn are rare and often fatal varieties of ectopic gestation [10]. In the case presented, the clinical manifestations included a period of amenorrhoea,

positive urine pregnancy test and right iliac fossa pain. A previous history of total salpingectomy on the right side made the probability of a repeat ectopic gestation on that side unlikely as we were unaware of any previous record of such an occurrence. Furthermore, cornual pregnancies often present with severe pain which may occur with or before rupture, and the latter event tend to occur in the second trimester. Profuse intraperitoneal hemorrhage is a common feature in such cases, and diagnosis is rarely made before rupture occurs[10]. The minimal hemoperitoneum encountered at laparotomy in the case presented can be attributed to the extensive fibrosis sequel to the previous surgery as evidenced by matting down of the left ovary and adjacent tissues to the uterus.

The diagnosis of acute appendicitis was based on the history and finding of tenderness in the right iliac fossa, this being the commonest cause. While the clinical features in this patient appear sparse, this is consistent with the known features of acute appendicitis, especially when it is not yet complicated by localized or generalized peritonitis[11]. In this patient, this diagnosis was favoured first because she has had a previous total salpingectomy on that side. After diagnosis an abdominal ultrasound was done as is the usual sequence and this confirmed the diagnosis. Consideration was given to antibiotic treatment as a prelude to surgical operation in order to control the infective process.

The diagnosis of cornual pregnancy can be made using ultrasound scan where it will appear as round cystic swellings with thick walls continuous with and inseparable from the myometrium. Its location at the cornu causes an eccentric bulging[12]. However, as was seen in the case presented, clinical diagnosis is deficient in about 20-40 per cent of probable ectopics[13]. Other diagnostic aids include the radio-immunoassay (RIA) of the b-subunit of human chorionic gonadotrophin (HCG). This is the gold standard of diagnosis and it is positive in virtually all cases of ectopic pregnancy[14]. Laparoscopy was also not immediately available for use in this case. It is the final decisive diagnostic test short of laparotomy.

Treatment is by a right cornual resection and repair. Conservative management could not be employed because of the partial rupture which had occurred. Fortunately, the outcome in this patient was favorable. It is attractive to suggest that cornual resection should always be done to prevent such an occurrence. However, the rare nature of cases like this, makes such a proposition difficult to make. Cornual wedge excision salpingectomy is considered unnecessary since it is probably associated with a higher incidence of homolateral interstitial pregnancies, more intraoperative blood loss and it predisposes to uterine rupture in subsequent gestation[15].

In conclusion, this case is a rare instance of a second ectopic pregnancy occurring at the site of a previous total salpingectomy. In view of the rarity of this presentation, no recommendations can be made on its possible impact on current management of ectopic gestation.

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