

RECURRENT ECTOPIC PREGNANCY AFTER IPSILATERAL SEGMENTAL SALPINGECTOMY

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SUMMARY

Objective: We report an unusual case of recurrent ectopic pregnancy in the distal remnant after partial salpingectomy.

Case Report: A 23-year-old woman underwent laparoscopic right partial salpingectomy because of right tubal pregnancy. She returned to our hospital 2 years later with a positive pregnancy test and lower abdominal pain. Transvaginal ultrasonography revealed no intrauterine gestational sac but a right adnexal mass measuring 2.4×2.3 cm. The serum β -hCG (β subunit of human chorionic gonadotropin) level was 2,918.06 mIU/mL. Videolaparoscopy was performed, and an ectopic pregnancy in the distal remnant of the right fallopian tube was identified. Right salpingectomy was effective and the pathologic report confirmed the diagnosis. The patient's postoperative recovery was uneventful.

Conclusion: If conservative methods are not suitable for a patient with tubal pregnancy, total salpingectomy is the preferred option over partial salpingectomy. A remnant poses a risk for recurrent ectopic pregnancy owing to potential transperitoneal migration of either embryos or sperms. [*Taiwan J Obstet Gynecol* 2008;47(2): 203–205]

Key Words: ectopic pregnancy, recurrent, segmental salpingectomy

Introduction

Ectopic pregnancy occurs in 1.3–2% of all pregnancies, and women with a history of prior ectopic pregnancy have an approximately eightfold increased risk of further episodes in the future [1]. The most common site for implantation of an ectopic pregnancy is the fallopian tube, with an incidence of up to 95% [2]. Current surgical management of tubal pregnancy includes conservative (usually salpingostomy) and radical (total or partial salpingectomy) methods. Appropriate management is central to fertility sparing and preventing further complications.

We report an unusual case of recurrent ectopic pregnancy in the distal remnant of right fallopian tube following a previous partial salpingectomy. Given the possible transperitoneal migration of human embryos or sperms and the increased risk of future ectopic pregnancies associated with previous episodes, total salpingectomy should be the treatment of choice if conservative methods are not suitable.

Case Report

A 23-year-old, gravida 3, para 1, woman presented to the emergency department, complaining of irregular vaginal spotting and right lower abdominal pain. The pain was dull in nature and had been present for weeks. A positive pregnancy test had been performed at a local clinic prior to presentation. Transvaginal ultrasonography revealed an empty uterus and a right adnexal mass measuring 2.02×1.56 cm. Her serum β -hCG level was



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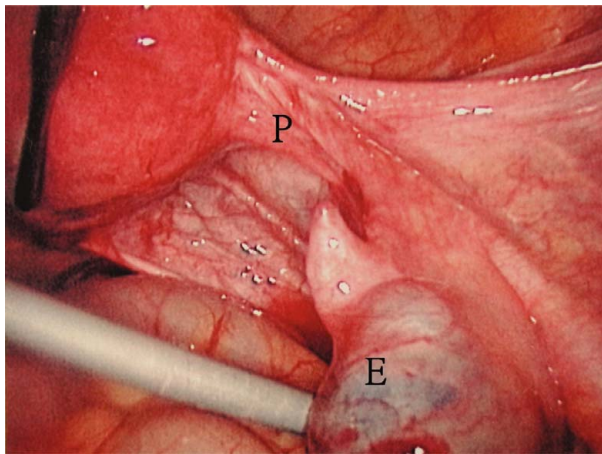


Figure. Videolaparoscopy shows the site of the previous proximal segmental resection (P) and an ectopic pregnancy (E) in the distal remnant of the fallopian tube.

7,244.4 mIU/mL. Diagnostic videolaparoscopy was performed. Intraoperatively, ectopic pregnancy was identified in the proximal part of the right fallopian tube. Salpingostomy failed because of active bleeding following the procedure. Instead, a segmental resection of the affected tube was performed, with the proviso that future reanastomosis could be considered. Pathologic report on the specimen confirmed the diagnosis. Her postoperative recovery was uncomplicated.

Two years later, the woman returned to our emergency department, complaining of a delay in her menstruation and right lower abdominal pain. On investigation, her urine pregnancy test result was positive and the serum β -hCG level was 2,918.06 mIU/mL. No intrauterine gestational sac was seen via transvaginal ultrasonography. Instead, a right adnexal mass measuring 2.4×2.3 cm was seen and was associated with a small amount of cul-de-sac fluid. She was admitted for an emergency laparoscopy to exclude a recurrent ectopic pregnancy. On laparoscopy, an ectopic pregnancy was found in the distal remnant of the right fallopian tube (Figure). The distal remnant and the products of conception were removed, and the interstitial part of the proximal remnant was ligated with bipolar electrocauterization. She was discharged the following day and was seen to be doing well at a follow-up clinic 1 week later.

Discussion

Ectopic pregnancy remains an important cause of morbidity in early pregnancy; it is one of the leading causes of maternal death in the first trimester of pregnancy. The main risk factors for ectopic pregnancy include

a significant infectious history, smoking, age, previous spontaneous abortions, previous infertility, and previous use of an intrauterine device. Previous medically induced abortion and ectopic pregnancy are also associated with a risk of ectopic pregnancy [1,3]. The most common site for ectopic pregnancy is in the fallopian tube. It accounts for 95% of all ectopic pregnancies. The classical triad of amenorrhea, abdominal pain and vaginal bleeding is important but only present clinically in 50% of patients. Early diagnosis of tubal pregnancy can be made with ultrasonography and the measurement of the serum β -hCG level. Ultrasonographic findings suggestive of ectopic pregnancy include an empty uterus with a serum β -hCG level greater than 1,500 mIU/mL, cystic or solid adnexal or tubal masses (including the tubal ring sign, representing a tubal gestational sac), a hematosalpinx, and echogenic or sonolucent cul-de-sac fluid.

Current management of ectopic pregnancy includes medical (e.g. administration of methotrexate) and surgical (laparotomy or laparoscopic surgery) approaches. The surgical intervention for tubal pregnancy can be radical (salpingectomy) or conservative (usually salpingostomy). For women who are not concerned about future fertility or are with a severely damaged fallopian tube, salpingectomy would be considered.

In our case, right proximal segmental resection was performed following the patient's first ectopic pregnancy because of active bleeding after salpingostomy. Future reanastomosis was discussed, but this did not materialize. The second ectopic pregnancy recurred in the distal remnant of the right fallopian tube 2 years later. The rare location of this ectopic pregnancy may be due to the transperitoneal migration of embryos or sperms. This theory has been mentioned in the literature [4–6] and has been proven through the study of non-communicating rudimentary uterine horn pregnancies. Nahum and colleagues [7] identified the occurrence of transperitoneal transmigration of gametes in humans. Sperm transmigration occurs in approximately 50% of cases and ovum transmigration in approximately 40% [7]. If a damaged or blunt-ended fallopian tube is the recipient of the fertilized ovum, the fertilized ovum will not be able to reach the uterine cavity for implantation. Typically, this results in an ectopic tubal pregnancy.

In conclusion, recurrent ectopic pregnancy following ipsilateral partial salpingectomy is an unusual occurrence [6]. However, given the possibility of transperitoneal migration of human embryos or sperms and the greatly increased risk associated with previous ectopic pregnancies, we suggest that total salpingectomy should be the treatment of choice if conservative methods are not suitable.

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