

# Intra- and Extra-uterine Pregnancies Following Repeated Sterilization in a Case of HIV Seropositive Patient

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## Abstract

A 24-year-old woman, HIV seropositive, LMP ten weeks previously, para 2-0-0-2, presented with complaints of left sided pelvic pain. Her previous pregnancies were terminated by cesarean section with tubal sterilization (Pomeroy technique) in the first pregnancy and by cesarean section with repeated tubal sterilization (Pomeroy technique) in the second one. The pelvic examination revealed cervical motion tenderness and a tender sausage-like mass of about 3 x 4 cm in the left adnexa. Both previously ligated fallopian tubes and a hematosalpinx lying distal to the ligated site of the left tube were revealed in the exploratory laparotomy after a positive culdocentesis. Bilateral salpingectomy was performed. The histological examination confirmed the diagnosis of tubal pregnancy in the left tube and the status post tubal sterilization in the right one. The postoperative course was uneventful.

**Key word :** Extrauterine Pregnancy, Repeated Sterilization, HIV Seropositive

## CASE REPORT

SC, a 24-year-old Thai woman, HIV seropositive, para 2-0-0-2, arrived on October 9, 1996 with the complaint of left sided pelvic pain. In August 25, 1993, we performed a cesarean section with tubal sterilization (Pomeroy technique) because of transverse lie in her first pregnancy when the gestational age was 39 weeks. The postoperative course was uneventful. The portion of both fallopian tubes were confirmed by histology. Seven months later, she went to the hospital because of her missed period, nausea and vomiting. The 4

week intrauterine fetus was confirmed by ultrasound. We again performed a cesarean section because of the previous cesarean section when the gestational age was 38 weeks with tubal sterilization, Pomeroy technique. Both ovaries were normal. At the isthmus portion of each fallopian tube which had previously been resected, there was a constriction. Repeat-tubal sterilization was performed again near the constriction and histological examination confirmed that those resected tissues were fallopian tubes. The postoperative course was uneventful.

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The patient went to the emergency room on October 9, 1996 with a LMP (July 28, 1996) ten weeks previously and a one day history of acute dull aching left lower quadrant pain. The abdomen was tender at the left lower quadrant. Pelvic examination revealed an enlarged uterus about 10 week-pregnancy size cervical motion tenderness and a tender sausage-like mass of about 3x4 cm in the left adnexa. After a positive culdocentesis, exploratory laparotomy was performed. There was about 100 ml of blood in the cul-de-sac. Both fallopian tubes were seen ligated at the isthmus region, distal to the ligated site of the left tube, a hematosalpinx of about 3.5 cm in diameter was found. There was some blood collection at the left broad ligament of about 5 cm in diameter just beneath the left fallopian tube. Corpus luteum of pregnancy was seen in the left ovary. Bilateral salpingectomy was performed. The histological examination confirmed the diagnosis of tubal pregnancy in the left tube and the status post tubal sterilization in both tubes. The postoperative course was uneventful.

## DISCUSSION

Ectopic pregnancy, an uncommon complication, following tubal sterilization, is a serious problem when it occurs. The failure rate of tubal sterilization at the time of cesarean section has been reported to be 1 in 57 for the Pomeroy technique<sup>(1)</sup>. We believe this is the first report of failure of tubal sterilization followed by an intrauterine pregnancy, subsequently repeated tubal sterilization followed by ectopic pregnancy in the same HIV seropositive patient. There is an only reported case of twice tubal sterilization failure followed by twice ectopic pregnancies reported by Etherington et al<sup>(2)</sup>. In their report, the first tubal sterilization was performed by laparoscopy with Filshie clips and the

second one was performed by Pomeroy technique. But in this report, both tubal sterilization were performed by using Pomeroy technique at the time of cesarean section.

Tubal ligation technique is a risk factor for ectopic pregnancy following tubal sterilization. The most successful tubal sterilization are those that occlude the fallopian tube without transection (i.e., by the use of Silastic bands or Hulka clips) resulting in decreased risk of tuboperitoneal fistula formation<sup>(3)</sup>. Among the several transection methods of tubal sterilization, those procedures that bury the proximal tubal segment (i.e., the Irving or Uchida procedures) should yield more successful results<sup>(3)</sup>. But in this report, we didn't use either Irving or Uchida procedure in the second cesarean section because we thought at that time that repeated tubal sterilization by any method should be reassured for sterilization.

The failure rate is higher if tubal sterilization is performed just after delivery or during the puerperium. The reason is the tubes are still edematous after delivery which increase the chance of incomplete tubal occlusion increases<sup>(2)</sup>. The failure rate of tubal sterilization is much greater when performed at the time of cesarean section than that carried out after vaginal delivery<sup>(1)</sup>.

There are many kinds of management of those patients with ectopic pregnancy following tubal sterilization. Bilateral salpingectomy, unilateral salpingectomy with/or without repeat sterilization in the other fallopian tube<sup>(4,5)</sup>. In our case, we performed bilateral salpingectomy because she had had previously repeated sterilizations before the ectopic pregnancy and it was very difficult to identify the proximal tuboperitoneal fistula site that must have existed for those intrauterine pregnancies<sup>(3)</sup>.

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## การตั้งครรภ์ในและนอกมดลูก หลังการทำหมัน 2 ครั้ง ในผู้ป่วยที่มีภาวะติดเชื้อเอชไอวี

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ผู้ป่วยหญิงไทยคู่ อายุ 24 ปี มีภาวะติดเชื้อเอชไอวี มาโรงพยาบาลด้วยเรื่องปวดท้องน้อยด้านซ้าย 1 วัน ผู้ป่วยเคยตั้งครรภ์มาแล้ว 2 ครั้ง ครั้งแรกคลอดบุตรโดยการผ่าตัดคลอดทางหน้าท้องและทำหมันด้วยวิธี Pomeroy technique ครั้งที่ 2 คลอดบุตรโดยการผ่าตัดคลอดทางหน้าท้องและทำหมันด้วยวิธีเดิม การตรวจภายในครั้งนี้พบว่ามีอาการเจ็บเมื่อยกปากมดลูก และตรวจพบก้อนรูปรึยาวขนาดประมาณ 3 x 4 เซนติเมตร และกดเจ็บที่บริเวณปีกมดลูกด้านซ้าย หลังจากเจาะ cul-de-sac ได้ผลบวกแล้วจึงได้ผ่าตัดพบว่า ท่อนำไข่ทั้ง 2 ข้างมีรอยถูกตัดทำหมันมาก่อน และพบมีก้อนเลือดในท่อนำไข่ ด้านซ้ายถัดจากรอยถูกตัดทำหมัน ได้ทำการผ่าตัดท่อนำไข่ออกทั้งสองข้าง และจากการตรวจทางพยาธิวิทยาพบว่ามีการตั้งครรภ์ในท่อนำไข่ด้านซ้าย และท่อนำไข่ทั้งสองข้างมีรอยถูกทำหมันมาแล้ว หลังผ่าตัดผู้ป่วยอาการปกติ ไม่มีภาวะแทรกซ้อนใด ๆ

**คำสำคัญ :** การตั้งครรภ์นอกมดลูก, การทำหมันซ้ำ, ภาวะติดเชื้อเอชไอวี

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