
Ectopic pregnancy following microsurgical transposition of Fallopian tube

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INTRODUCTION

A case of successful microsurgical Fallopian tube transposition with subsequent term pregnancy was recently reported¹. The addition of this case to the summary provided by Goldberg and colleagues² would change the success of this surgical procedure as follows: 89% pregnancies with 55.6% term deliveries, 22.2% first trimester abortions and 11.1% ectopic pregnancies. We now report another pregnancy after microsurgical transposition of the Fallopian tube that unfortunately resulted in an ectopic pregnancy.

CASE REPORT

A 30-year-old Go Po female sought help in achieving a pregnancy. She previously underwent an appendectomy and left salpingo-oophorectomy for pelvic peritonitis due to ruptured appendix. Hysterosalpingography was indicative of a unicornuate uterus with visualization of the interstitial portion of the left Fallopian tube (Figure 1). At the time of laparoscopic evaluation a normal in appearance right tube and ovary were noted, with the right tube attached to a rudimentary uterine horn. The left unicornuate uterus was adherent to the left lateral pelvic wall and bowel.

The patient was advised that successful surgical correction of this problem (single left unicornuate uterus with surgically absent ipsilateral tube and ovary) had been reported only once previously³. *In vitro* fertilization was recommended but this was not economically feasible. The significant risk of ectopic pregnancy was explained but the patient desired to undergo reconstructive surgery.

Laparotomy findings in September, 1986 included a left hemiuterus adherent to the omentum, bowel and left pelvic side wall. There were also adhesions between the right Fallopian tube and right pelvic side wall. The right tube appeared to be normal in shape and measured 6–7 cm in length. It was composed of ampulla and infundibulum and fimbriae, but no isthmic

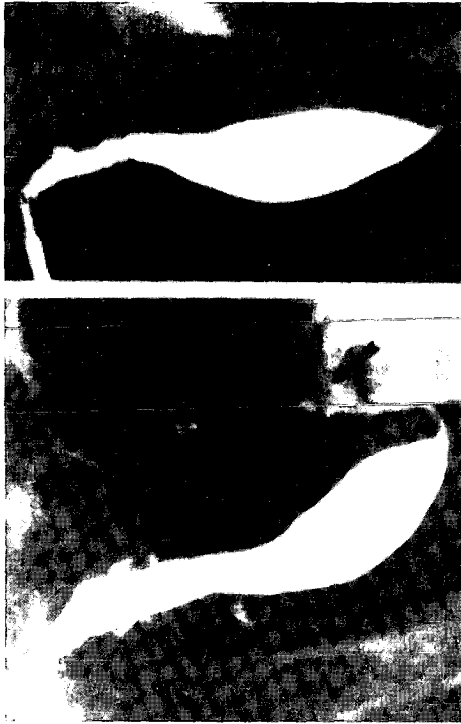


Figure 1 Hysterosalpingogram, preoperative (upper), postoperative (lower) showing area of intrinsic tubal defect (arrow)

portion was identified. There were several non-absorbable sutures in the pelvis, and one was located very close to the cornua of the left hemiuterus.

With a size 8-0 Foley catheter in the uterus, microsurgical adhesiolysis was performed. An incision was made in the peritoneum covering the left round ligament. With the dissection of the connective tissue around the round ligament enough relaxation was achieved to allow mobilization of the uterus into a more medial position by rotation in a counterclockwise fashion. Following sharp incision of the isthmus on the left side, patency of the isthmic portion was demonstrated as well as normal luminal diameter. After incising the serosa over the right Fallopian tube, it was excised from the undeveloped right uterine horn and brought more medially (clockwise rotation). Patency was confirmed. Transposition of the right oviduct to the left unicornuate uterus was achieved by suturing the left mesosalpinx to the serosa under the right tube. Anastomosis of the right ampullary segment to the left isthmus was performed in two layers: first, 8-0 polyglycolic acid suture for muscular layers in interrupted fashion at the cardinal points and secondly, 7-0 polyglycolic acid suture for the serosa (Figure 2). Ascending chromotubation confirmed tubal patency without any leakage at the anastomotic site.

The gap between the tube and ovary was closed using 7-0 polypropylene

ECTOPIC PREGNANCY AFTER TUBAL TRANSPOSITION

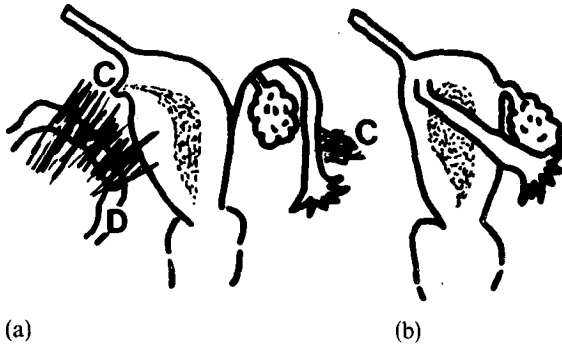


Figure 2 Schematic drawing of the pelvic findings, (a) preoperative; (b) postoperative. C = adhesions; D = intestine. The left of the uterus is on the left of the diagram in each case

The gap between the tube and ovary was closed using 7-0 polypropylene non-absorbable interrupted sutures between the fundus of the left hemiuterus and the rudimentary right horn to decrease tissue tension. The sutures of 7-0 polypropylene were placed in the fimbria ovarica and the right ovary to approximate the tube and ovary. Defects in the peritoneal surface were closed using 8-0 polyglycolic acid sutures.

Postoperative hysterosalpingography 8 months after surgery demonstrated a patent Fallopian tube. However, there was a small filling defect in the mid-ampullary portion consistent with epithelial debris or a small polyp (Figure 1).

An ovulation defect was detected and the patient was treated with human menopausal gonadotropin (hMG). She conceived during her first treatment cycle. Concentrations of β -human chorionic gonadotropin initially rose appropriately but then plateaued, creating the suspicion of an ectopic pregnancy. The diagnosis of ectopic pregnancy was confirmed by ultrasonography. The patient underwent a laparotomy and linear salpingostomy.

DISCUSSION

The addition of this case to the literature now changes the ectopic pregnancy rate from 11.1% (1/9) to 20% (2/10). The recent summary of the excellent prognosis for pregnancy following tubal transposition prompted us to report this case to present a more realistic appraisal of the risk of ectopic pregnancy. The addition of this case to the literature now changes the pregnancy rate from 89% (8/9) to 90% (9/10); however, we suspect that this is a spuriously high rate when related to non-reporting of failures. There is a good possibility that this ectopic pregnancy was not related to the surgical procedure but was secondary to an intrinsic tubal defect, since the site of the ectopic pregnancy in the ampullary portion of the tube 15–20 mm from the anastomosis site coincided with the filling defect previously demonstrated by hysterosalpingography. We therefore suggest that salpingoscopy might be helpful prior to tubal reconstruction.

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