



## CASE REPORT

# Successful pregnancy after office microlaparoscopic correction of tubal herneation for a very rare congenital fimbrial-ovarian relationship, a case report ☆

Emad M. Siam \*

*Department of Obstetrics and Gynecology, College of Medicine, El-Minya University, Egypt*

Received 10 March 2011; accepted 14 April 2011

Available online 1 June 2011

### KEYWORDS

Ciliary activity;  
Fimbriae;  
Laparoscopy;  
Ovum retrieval

**Abstract** At the moment of ovulation the follicular fluid and the cumulus oophorus are released from the follicular environment. How the cumulus oophorus is picked up by the fimbriae in the human is unknown. Studies in rabbits have suggested that ova could be 'sucked' into the oviduct, a theory that was further supported by the report of a negative pressure caused by tubal contractions (1–3). This was refuted, however, by experiments in which oviducts were ligated at the base of the fimbriae and contractibility was blocked by propanol (4). In women, Edwards and Steptoe (1975) observed at laparoscopy that blood vessels in the fimbriae became engorged at ovulation to form a type of erectile tissue and that extensions from the fimbriae became arranged over the ovulating follicle. They suggested that ovum retrieval is controlled by muscular contractions (5–7).

The precise process of the entrapment of the oocyte by the fimbriae at the moment of its release has to the best of our knowledge never been observed in vivo in the human. Therefore laparoscopic manipulation is required to expose the full ovarian surface and the fimbriae, which are usually lying in the fossa ovarica in contact with the caudal pole of the ovary (8–10).

☆ The research work had been done in El-Minya University Hospital, a tertiary referral center in upper Egypt.

\* Tel.: +20 846344978, mobile: +20 103480999; fax: +20 846355817.  
E-mail address: eemsalah@yahoo.com



The process of ovum retrieval by the fimbriae in the human still remains elusive. Animal studies have suggested that ova can be 'sucked' into the oviduct by negative pressure caused by muscular contractions of the tube, while laparoscopic observations in women have indicated a close relationship between fimbriae and the ovulating ovary (11,12).

Here, a case is described in which a very rare congenital tubo-ovarian relationship had been observed and assessed during routine laparoscopy to discover the cause of delayed conception after previous spontaneous pregnancy. This very rare tubo-ovarian relationship had been observed directly using a newly advanced fiber optic 2 mm microlaparoscopic set, in an office procedure under augmented local anesthesia in stead of the conventional 10 mm laparoscopy.

© 2011 Middle East Fertility Society. Production and hosting by Elsevier B.V. All rights reserved.

## 1. Introduction

How the cumulus oophorus is picked up by the fimbriae in the human is unknown. This was refuted, however, by experiments in which oviducts were ligated at the base of the fimbriae and contractibility was blocked by propanol (1–3).

The precise process of the entrapment of the oocyte by the fimbriae at the moment of its release has to the best of our knowledge never been observed *in vivo* in the human. Therefore, laparoscopic manipulation is required to expose the full ovarian surface and the fimbriae, which are usually lying in the fossa ovarica in contact with the caudal pole of the ovary (4–10).

Here, a case is described in which a very rare tubo-ovarian relationship had been observed directly using a newly advanced fiber optic 2 mm microlaparoscopic set, in an office procedure under augmented local anesthesia.

## 2. Case report

As part of a fertility work-up, a 25 year old patient with a 2 year history of secondary subfertility was subjected to all fertility work up, including ovulation monitoring through both hormonal profile and ultrasonographic follicular maturation follow up. Her partner had been confirmed to be fertile. Hysterosalpingography (HSG) had confirmed patent tubes without any signs of proposed pelvic adhesions.

Formal consent had been taken from the lady for an office microlaparoscopic procedure under augmented local anesthesia to complete the fertility work up. A date had been allocated for the procedure at the 10th day of the lady's cycle in the day surgery unit.

### 2.1. Office Microlaparoscopic Surgical procedure

The microlaparoscopic system consists of a light source, a high speed pneumoperitoneum device, and a 1CCD video camera. The diameter of the scope was 2 mm, and the grasping forceps, scissors, needle probes, biopsy forceps and irrigator-aspirator were also 2 mm in diameter (all equipment made by Olympus, Tokyo, Japan) (11–15).

The instruments could be used by specially designed trocar (access needle; Ethicon, Cincinnati, OH, USA), 12-cm long and 2.2 mm in diameter metal sleeve that fits over the veress needle. Pre-medication consisting of 0.5 mg of atropine sulfate and 1 mg/kg of midazolam was given intramuscularly. One mg/kg of fentanyl followed by 1.5 mg/kg of ketamine was intravenously administered through a drip infusion line (15,16).

The patient was placed in a lithotomy position. An access needle (Ethicon, Tokyo, Japan) was inserted through a small incision created in the subumbilical region using the closed method, after been locally infiltrated with xylocaine local anesthesia.

Pneumoperitoneum was induced with carbon dioxide gas. Other access needles were then inserted into both sides of the hypogastric region under microlaparoscopy. Four ml/port of 0.25% bupivacaine was locally injected at the trocar insertion sites in advance. All the scopes and forceps used were from the microlaparoscopic set was of 2 mm in its outer diameter (Olympus, Tokyo, Japan) while the ovarian ligament was held by holding forceps to fix it (16–19).

Exploration of the pelvis, had confirmed apparently healthy normal sized freely mobile AVF uterus. No pelvic adhesions had been observed. Both ovaries could be visualized as apparently healthy but highly situated in the upper part of the lateral pelvic wall. Both tubes could not be visualized in the whole pelvis. Only a small punctum had been observed in the upper part of the lateral pelvic wall just above the insertion of both round ligaments, and beside both ovaries (Figs. 1 and 2).

A trial of exploration of this small punctum had revealed an apparently healthy freely mobile fimbrial end which is in close relation to this punctum, but with the proximal part of the fallopian tube stuck to the lateral pelvic wall. The picture could be described as an abnormally situated inter-peritoneal ovary, but with an abnormally situated extra-peritoneal tube, with only a small punctum in the window of their relationship. A



**Figure 1** The right ovary beside the pelvic portion of the right round ligament, with clear absence of the right tube, behind the parietal peritoneum, covering the lateral pelvic wall.

Download English Version:

<https://daneshyari.com/en/article/3966344>

Download Persian Version:

<https://daneshyari.com/article/3966344>

[Daneshyari.com](https://daneshyari.com)