

The Rare Abnormality of Fallopian Tube: A Case Report

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Abstract

Different congenital abnormalities of the fallopian tubes can be found during laparoscopies performed due to infertility or for other conditions.

We report a case of a rare congenital abnormality of Fallopian tubes there the middle portions of tubes were located extraperitoneally in a woman previously had a pregnancy and delivery.

It is the evidence of the importance of chromohydrotubation during the laparoscopic investigation of implied tubal infertility even if the middle part of the tubes is unobservable.

Keywords: Congenital Abnormality; Fallopian Tubes; Infertility; Laparoscopy; Chromohydrotubation

Introduction

Different congenital abnormalities of the fallopian tubes can be found during laparoscopies performed due to infertility or for other conditions [1]. Few such reports have been previously published [2-4]. This article reports a case of an abnormality in the fallopian tubes of a 27-year-old woman with secondary infertility. Despite the abnormality, the patient had a prior pregnancy.

Case Report

A 27-year-old woman, gravid 1, with 1 prior delivery presented with secondary infertility. She had no menstrual disorders or surgeries and had one prior pregnancy. Two years ago before the operation, she had tested positive for chlamydia trachomatis discovered via a polymerase chain reaction. Physical examination and bimanual pelvic examination revealed no abnormalities. A laparoscopy was performed. The patient's infundibular pelvic ligaments were very short, so both of her ovaries were located on the pelvic wall. We examined only a small part of the isthmic portion near the uterus of both fallopian tubes, and most of the isthmic and ampullar portions were located extraperitoneally. The fimbria on the left and right sides appeared intraperitoneally and were normal but located on the pelvic wall (Figure 1 and 2). One year later, she delivered a second child.

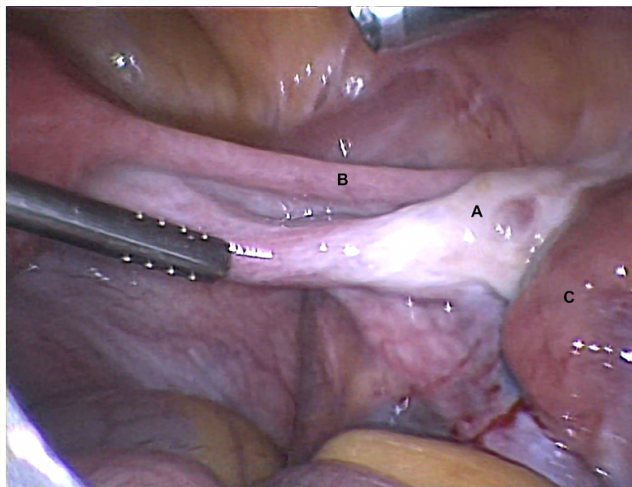


Figure 1: Laparoscopic overview of the right ovary (A) and fallopian tube (B). The middle portion of the fallopian tube is absent (located extraperitoneally). (C) The normal distal portion with oedematous fimbriae of the right fallopian tube.

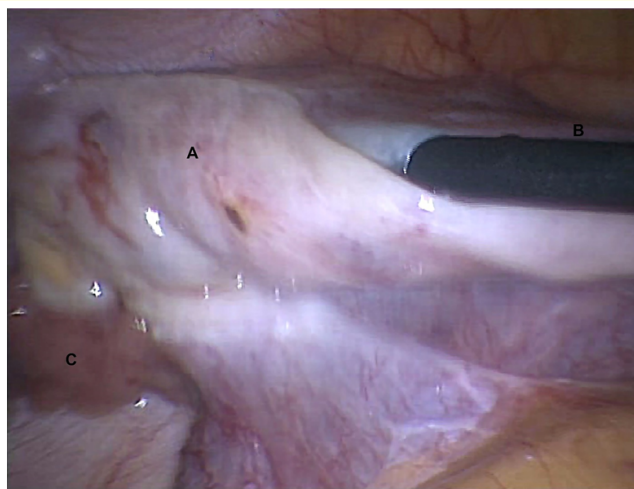


Figure 2: Laparoscopic overview of the left ovary (A) and fallopian tube (B). The middle portion of the fallopian tube is absent (located extraperitoneally). The distal portion is located between the bowel loops on the pelvis wall.

During the patient’s surgery, we thought that we also found the absence of the middle portion of the tubes. However, the patient’s history of childbirth refuted this hypothesis. Moreover, during dye hydrotubation, we discovered the dye solution in the peritoneum appearing near the fimbria of the fallopian tubes (Figure 3 and 4).

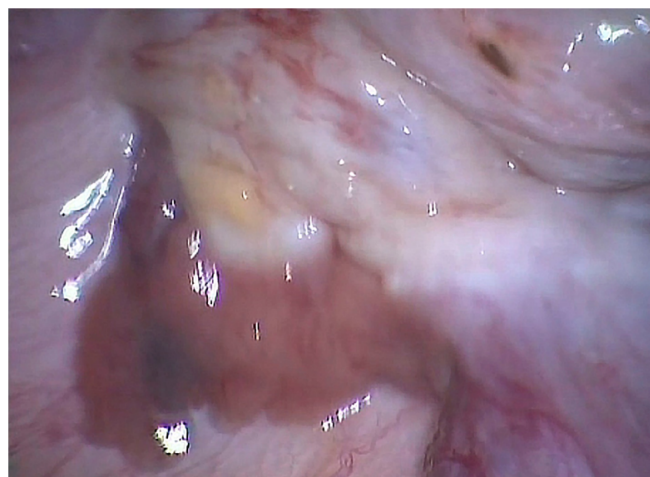


Figure 3: Dye appearance from the left fallopian tube fimbrial end.

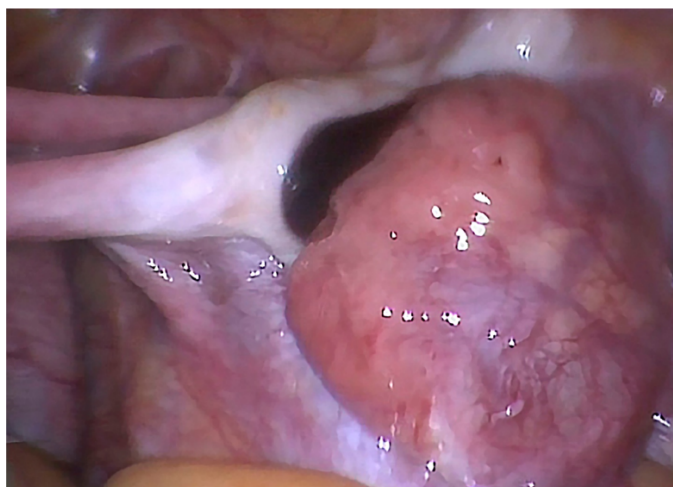


Figure 4: Dye appearance from the right fallopian tube fimbrial end.

Discussion

Müllerian anomalies are the results of a multifactorial process occurring at 6 to 9 weeks of gestation [5]. Interactions between the mesenchyme and epithelium are the basis of normal organogenesis and gonadal differentiation [1]. We investigated PubMed articles for any types of fallopian tube abnormalities. In 2010, S. Nishiyama, *et al.* divided all of the pathologies into four variants: absence of both the ovaries and fallopian tubes; anomalies of both the ovaries and fallopian tubes; anomalies of the fallopian tubes only; and anomalies of the

fallopian tubes and the uterus, with normal ovaries. The authors divided the fallopian tubes into 3 locations: the proximal portion near the uterine horn, the middle portion of the ampulla and the isthmus, and the distal portion consisting of the fimbriae and the distal ampulla. According to this division in the present case, only the middle portion was located extraperitoneally. S. Nishiyama, *et al.* reported the absence of middle portions of the tubes. It was posited that the partial absence of the middle part of the fallopian tube could be associated with involvement of the mesenchyme and perhaps indirectly with the topographic loss of müllerian-inhibiting substance susceptibility for regression of the müllerian ducts.

Conclusion

No similar cases were found in PubMed. Thus, a well-documented classification of the abnormal development of the tubes and ovaries remains to be elucidated [1,6]. This report should assist in producing a new classification. Furthermore, a dye hydrotubation during the laparoscopic investigation of implied tubal infertility is important even if the middle part of the tubes is unobservable.

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