CASE REPORT

B/L Tubal Anomaly (Congenital): A Rare Tubal Infertility Factor

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Abstract

Infertility is a growing concern of society which might be due to defects in tubal, ovarian, and uterine or a combination of factors. During routine practice, we usually found anomalies of the uterus or vagina and sometimes blocked fallopian tubes in primary infertility cases but congenital anomalies related to ovaries and tubes are of rare occurrence. Nowadays, tubal factor infertility is the leading cause of female factor infertility which might result from a partial or complete absence of a fallopian tube; however, the true incidence of this condition is not reported yet, but till now very few cases of tubal anomalies (basically unilateral) have been reported in the literature. Here, we report a case of a nulliparous young aged female, who was presenting in an outpatient department with complaints of primary infertility and intraoperatively, found to have B/L tubal anomaly (congenital) during laparoscopy.

Keywords: Congenital anomaly, Primary infertility, Tubal factor infertility.

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Introduction

Infertility is defined as a couple's failure to conceive after 1 year of regular, unprotected intercourse.[1] Tubal factor infertility is among the leading causes of female factor infertility accounting for 7–9.8% of all female factor infertilities. The tubal disease directly causes 36% and 85% of all cases of female factor infertility in developed and developing nations, respectively.[2] Here, we report a case of a nulliparous young aged female, who was presenting in an outpatient department with complaints of primary infertility and intraoperatively, found to have B/L tubal anomaly.

Case Description

A nulliparous young aged female walked into the Gynaecology outpatient department, as a case of primary infertility. She had a marital history of seven and half years and staying regularly with her husband. She had no previous history of any kind of menstrual irregularity in the past and even she does not have any kind of surgical history. On clinical examination, she was found to be a fit and healthy young woman with normal development of secondary sexual characteristics. General, speculum, and vaginal examinations were normal. The transvaginal scan was found to be normal and to rule out PCOD, her serum TSH, prolactin, and anti-Müllerian hormones were checked and found to be within normal limits. HSG showed features of hydrosalpinx (dilated left tube with no peritoneal spill and mildly dilated distal end of the right tube). For further evaluation of tubes, planned for laparoscopy (Fig. 1).

Per-operatively, on hysteroscopy, the uterine cavity appeared normal, and B/L ostia seen.

During laparoscopy, the uterus appears normal in size and shape with normal round ligaments. The left fallopian tube appeared like a stump (measuring approximately 1.5 cm) followed by a streak fallopian segment and fibrial end. The left ovary appeared normal with normal ovarian and suspensory ligament. The right fallopian tube was found to be dilated and the fimbrial end was found to be located posteriorly behind the tube. The right ovary appeared normal.

There was a presence of mild straw-colored fluid in POD which was sent for routine analysis and culture sensitivity. Endometrial tissue was taken and sent for histopathological correlation. The patient was then managed with antibiotics and all other supportive measures. The postoperative course was uneventful and the patient was discharged in stable condition on the second postoperative day.

The patient was followed up after 1 week with no fresh complaints and endometrial HPE showed multiple gray-brown soft tissue pieces (measuring 1. × 1 × 0.5 cm) and microscopic examination showed polypoidal late secretory endometrium with no features of granuloma and atypia.

After a full explanation of the findings, the patient was referred for IVF because of tubal factor infertility.

Discussion

Congenital Müllerian duct abnormalities are considered fairly common and have been estimated to be present in 1 in 500–700 women.[3,4] Among the congenital abnormalities of the female genital tract, structural abnormalities of the fallopian tube are, however, very rare[4] which can be divided into three groups:

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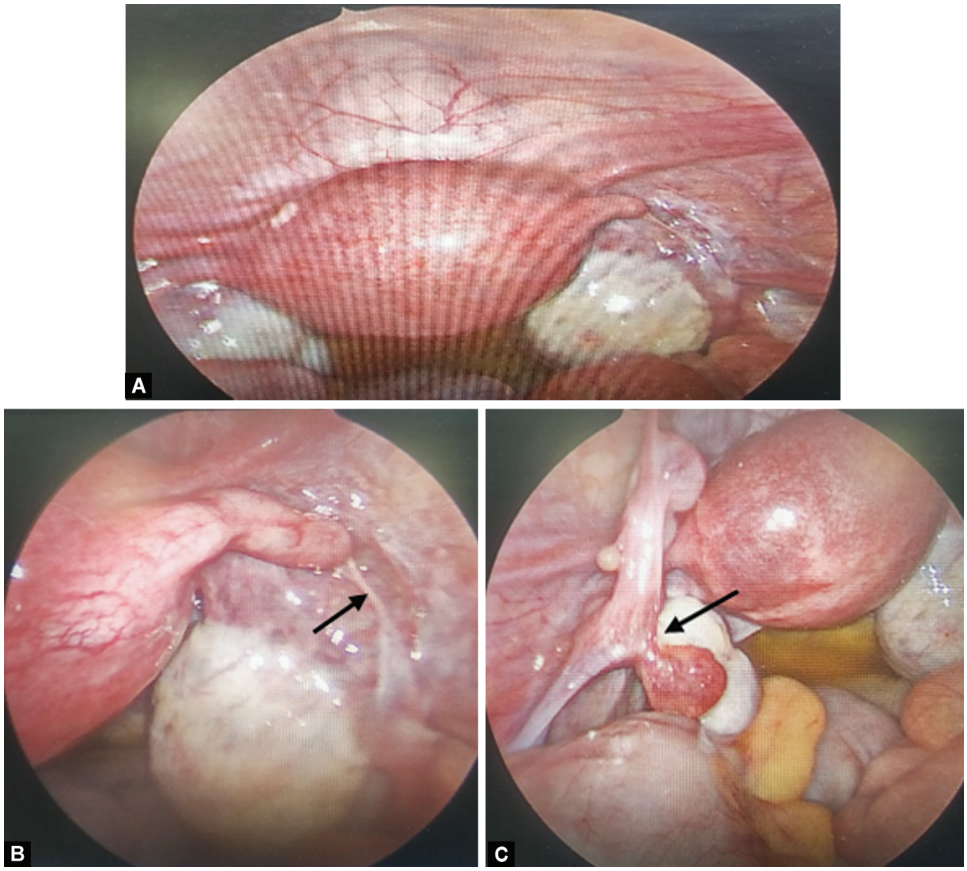

Figs 1A to C: Clinical images of the patient

(a) Complete absence, (b) Partial or segmental absence, or (c) Duplication, accessory ostia and tubes, multiple Lumina and diverticula. Any disturbance in the migration, fusion, or resorption of Müllerian ducts may result in an anomaly.[5]

The present case was found to have a bilateral tubal anomaly which might be the result of a defect in the development of the Müllerian and mesonephric duct and the hypothesis of the congenital defect is rather strong. As per the VCUAM classification,[6] our case belongs to class-A 1b (bilateral tubal malformation, ovaries normal).

The contralateral tube (right side tube) was found to be dilated in shape. Thus, this situation raises the question of whether structural or morphological changes results in elongation or dilatation of the remaining fallopian tube, are congenital (as the fimbrial end was located somewhere posteriorly behind the tube), or might be due to PID (as straw-colored fluid present in POD which showed the presence of *Pseudomonas aeruginosa* on culture sensitivity).

Conclusion

- In cases of tubal obstruction, laparoscopy is a mainstay for the exact diagnosis of infertility which will be helpful for effective decision-making for further management.
- In the present scenario, cases of tubal factor infertility with normal ovaries and uterus can be planned for IVF, so that childless couples would be able to get their own child.

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