

THE CERVICAL CROSSOVER PHENOMENON – A NOVEL MULLERIAN ANOMALY?



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Introduction

The cervix originates from the Mullerian duct which develops as part of the female reproductive tract around the 6th week of embryogenesis. The fusion and reabsorption processes in the development of the Mullerian ducts in the superior-convergent and inferior-divergent portions can result in atypical or transitional cases without a classification.

Objectives

We report a case series of three women with differing gynecological presentations found each to have a didelphys uterus with two endocervical canals diverging in a left-to-right crossover arrangement, contralateral to the position of the uteri. To our knowledge, this phenomenon has not been described in published literature.

Case

Case 1 40-year-old single woman who underwent a diagnostic laparoscopy after failing to conceive with donor sperm insemination cycles.

Case 2 18-year-old patient who had a history of body dysmorphia and pelvic pain.

Case 3 35-year-old with primary infertility seeking assisted reproductive treatment.

Typical
Didelphys Bicornis



Didelphys Bicornis
With Cervical Crossover



Discussion

All cases were found to have a cervical crossover arrangement had different presenting complaints, including pelvic pain and infertility. The impact of this finding on obstetric and fertility outcomes are yet to be determined.

Despite many proposed classification systems for Mullerian anomalies, current known classification systems have not described the cervical crossover phenomenon. This finding challenges existing known developmental theories of the Mullerian duct and prompts further research.

Conclusion

The cervix is part of the female reproductive tract which plays a significant function in fertility, pregnancy and childbirth. Understanding cervical anatomical anomalies will help clinicians manage associated reproductive challenges.

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Disclosure

The authors declare no conflict of interests

