

HCA Healthcare

Scholarly Commons

OB-GYN

Research & Publications

11-7-2020

Diagnosis of a Longitudinal Vaginal Septum and Possible Uterus Didelphys Secondary to Coital Injury with an Artificial Phallus

Lauren Sword

Olga Marie Colon-Mercado

James Baron

Mark Sanchez

Tiffany R. Tonismae

See next page for additional authors

Follow this and additional works at: <https://scholarlycommons.hcahealthcare.com/obgyn>



Part of the [Female Urogenital Diseases and Pregnancy Complications Commons](#), and the [Obstetrics and Gynecology Commons](#)

Authors

Lauren Sword, Olga Marie Colon-Mercado, James Baron, Mark Sanchez, Tiffany R. Tonismae, and Nicole L. Plenty

Diagnosis Of A Longitudinal Vaginal Septum And Possible Uterus Didelphys Secondary To Coital Injury With An Artificial Phallus

Lauren Sword, DO¹; Olga Marie Colón-Mercado, MD¹; James Baron, MD¹; Mark Sanchez, MD¹; Tiffany Tonismae, MD^{1,2}; Nicole Plenty, MD, MS, MPH³

¹HCA Healthcare/USF Morsani College of Medicine GME Program, Brandon Regional Hospital, Obstetrics and Gynecology Department; Brandon, FL

²Johns Hopkins All Children's Hospital; Maternal, Fetal, and Neonatal Institute; St. Petersburg, FL

³Obstetrix Medical Group of Houston, Houston, TX

This research was supported (in whole or in part) by HCA and/or an HCA affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA or any of its affiliated entities.

Background: Müllerian duct anomalies (MDAs) are rare defects of the female genital system that result from failure of development, fusion, recanalization or resorption of the Müllerian ducts during embryologic development. Uterus didelphys is one of the least common MDAs and occurs when the Müllerian ducts fail to fuse, resulting in two separate uterine cavities and duplicated cervixes [1]. A longitudinal vaginal septum has been found to run between the two cervixes in most cases [2]. While commonly asymptomatic, some women with a longitudinal vaginal septum may experience dyspareunia, difficulty with tampon use and coital difficulty [3]. Uterus didelphys often goes unnoticed during pelvic and speculum examinations, with diagnosis commonly achieved during infertility work ups with the use of both imaging and surgical modalities. Vaginal postcoital injuries are very rare and identification of MDAs and/or vaginal anomalies secondary to sexual trauma have been minimally reported [4]. We present the case of a 23-year-old nulligravid female whose possible identification of uterus didelphys was achieved secondary to a coital injury to her undiagnosed longitudinal vaginal septum with an artificial phallus.

Case Report: The patient is a 23-year-old nulligravid female without significant past medical history who presented to the emergency department due to heavy postcoital bleeding associated with lightheadedness and dizziness. The vaginal bleeding began after her partner used an artificial phallus for penetration. The patient and her partner started engaging in sexual activity three weeks prior to the incident and they reported vaginal intercourse was difficult because of a narrow vaginal canal. The patient also reported that she had always had redundant tissue in her vagina and would experience continued vaginal bleeding during her periods despite proper tampon placement, leading her to believe she had a "second vagina". Initial speculum examination was limited due to active bleeding, which obstructed adequate visualization of the vaginal walls or cervix. A bimanual examination revealed a complete longitudinal vaginal septum and cervical duplication was suspected. A transvaginal ultrasound was performed and revealed two separate endometrial cavities, duplication of the cervix and a vaginal septum. Due to hemodynamic instability, decision was made to proceed to the operating room for examination under anesthesia. Examination revealed two vaginal canals with a complete longitudinal vaginal septum with a 2 cm proximal laceration. A speculum was inserted in both vaginal canals and two normal-appearing cervixes were identified. The septal laceration was repaired with 3-0 chromic in running fashion with excellent hemostasis achieved. The patient tolerated the procedure well and was discharged home on postoperative day 1.

Discussion: Tears to a longitudinal vaginal septum secondary to coital injury has only been reported once in the literature [4]. Our case follows this precedence, with a possible additional diagnosis of uterus didelphys, a very rare congenital anomaly, during the work-up. Our case confirms the previously reported co-existence of longitudinal vaginal septa with uterine didelphys [3,5]. While most patients with longitudinal vaginal septa are asymptomatic, our patient experienced the commonly cited symptoms of difficulty with intercourse and tampon use. Similarly, she went undiagnosed at her well-woman visit, even after bimanual and speculum examinations. A high index of suspicion is required in order to achieve a diagnosis, in addition to a combination of imaging and surgical techniques. While transvaginal ultrasound is an adequate initial imaging modality, it is often followed by MRI, which is considered the best noninvasive imaging modality for the differentiation of a septate, bicornuate and uterus didelphys. The MRI also allows for the diagnosis of renal anomalies, which have been identified in 30-50% of MDAs [6]. Most providers will also use hysteroscopic and laparoscopic surgery to confirm the diagnosis of a uterus didelphys. Because fertility rates are similar between women with normal uterine cavities and those with uterus didelphys, surgery is reserved for those who have had recurrent abortions or premature deliveries with no known etiology [7].

Conclusion: Uterus didelphys is a rare MDA that is often undiagnosed until infertility leads to extensive anatomic workup. Due to the co-existence of MDAs and vaginal septa, especially uterus didelphys, a high index of suspicion should prompt further imaging to arrive at a complete diagnosis. Even with proper diagnosis, treatment is reserved for patients experiencing symptoms or reproductive difficulties.

References:

1. G.F Grimbizis, M. Camus, B. C. Tarlatzis, J. N. Bontis, and P. Devroey, "Clinical implications of the uterine malformations and hysteroscopic treatment results," *Human Reproduction Update*, vol.7, no. 2, pp. 161-174, 2001.
2. Heinonen PK. Longitudinal vaginal septum. *Eur J Obstet Gynecol Reprod Biol.* 1982;13(4):253-258. doi:10.1016/0028-2243(82)90106-x
3. Haddad B, Louis-Sylvestre C, Poitout P, Paniel BJ. Longitudinal vaginal septum: a retrospective study of 202 cases. *Eur J Obstet Gynecol Reprod Biol.* 1997;74(2):197-199. doi:10.1016/s0301-2115(97)00105-x
4. Padoa A, Glick Fishman N, Tsviban A, Smorgick N. Vaginal postcoital injuries requiring surgical intervention: a case series and literature review [published online ahead of print, 2020 Jan 27]. *Int J Impot Res.* 2020;10.1038/s41443-020-0234-8. doi:10.1038/s41443-020-0234-8
5. Alur S, Nicandri K, Bhagavath B. Longitudinal vaginal septa with associated uterine anomalies: a case series. *Female Pelvic Med Reconstr Surg.* 2015;21(3):e23-e26. doi:10.1097/SPV.0000000000000140
6. Sharara FI: Complete uterine septum with cervical duplication, longitudinal vaginal septum and duplication of a renal collecting system. A Case Report. *J Reprod Med* 43(12): 1055,1998.
7. Heinonen PK. Clinical implications of the didelphic uterus: long-term follow-up of 49 cases. *Eur J Obstet Gynecol Reprod Biol.* 2000;91(2):183-190. doi:10.1016/s0301-2115(99)00259-6