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Case Report

Case report of a huge Gartner's cyst

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ABSTRACT

Gartner's cyst accounts for 11% of all vaginal cysts. It results from total or partial occlusion of Gartner's duct, the mesonephric duct remainder. It is often located in the anterior or lateral wall of the vagina from the cervix to the introitus, however it has exceptionally been described in the posterior location also. [1] It is typically small and asymptomatic and occurs along the lateral walls of the vagina, following the course of the Gartner's duct. Rarely it can be congenital. [2–5]

1. Case Report

A 38-year-old lady, para 2 live 2, sterilised, presented to the Gynecology OPD of the Department of OBG, SVMCH & RC, Ariyur, Pondicherry with chief complaints of a painless mass descending per vaginum since 7 years. Initially the mass was small in size but gradually increased over a period of time to cause severe dyspareunia. The mass not reducible and friction caused during walking was causing significant agony to her. There was no history of difficulty in micturition or passage of stools. Her menstrual cycles were regular with a moderate flow and no dysmenorrhoea. She did not have any associated medical disorders.

On initial examination, a cystic mass with solid components of size 9 x 4cms was seen protruding through the vagina. The surface of the mass was smooth and pale pink in colour (Figure 1). The base of the mass was extending to bilateral lateral walls. (Figure 2) On per speculum examination, the cervix was bulky and was visualised separately from the mass. On per vaginal examination, cervix was felt high up away from the base of the mass. Hence, the possibility of pelvic organ prolapse was ruled out. Uterus was anteverted, normal in size, mobile, bilateral fornices were unremarkable, the pouch of doughas was free and there was no associated pain, so there was no possibility of endometriosis. As the mass was painless and a needle aspiration did not yield any content, a diagnosis of bartholin's cyst / abscess was ruled out.

A provisional diagnosis of Gartner's cyst was made owing to the location of the cyst and patient was planned for cyst excision. However, a possibility of bladder diverticulum could not be ruled out as the bulb of the Foley's catheter that was inserted and inflated could be palpable separately from the mass. On passing a bladder sound, the tip of the sound was palpable within the mass (Figure 3). Hence, an on - table decision of performing cystoscopy was taken. On cystoscopy, using a 30- degree cystoscope, no evidence of bladder diverticulum was seen. Ideally an MRI should have been performed before the surgery as it is more diagnostic. However, the same was not done as it was expensive and a pelvic ultrasound done did not reveal any pathology. Since

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the diagnosis was inconclusive, mandating a MRI, surgery was abandoned and a MRI was done on the following day. MRI established the diagnosis of Gartner's cyst and clearly excluded the possibility of a bladder diverticulum.

The patient was posted for surgical excision of Gartner's cyst and the procedure was done under spinal anaesthesia in lithotomy position (Figure 4). The specimen was sent for histopathology. The reports revealed a non- mucin secreting low columnar and cuboidal epithelium, consistent with a Gartner's cyst. The patient was followed up after one month, and she had recuperated well.

Fig. 1: Pale pink, smooth mass of 9 x 4 cms

2. Discussion

Until the fifth to sixth week of fetal life, the genital system continues to be indifferent. Both the mesonephric duct (Wolffian duct) and paramesonephric duct (Mullerian duct) can be seen. The absence of anti-Mullerian hormone (AMH) and SRY gene conditions the regression of Wolffian duct and further differentiation of Mullerian ducts to form the reproductive system in females. Occassionally, the Wolffian ducts fail to regress, and their caudal portion forms vaginal inclusion cyst known as Gartner's duct cyst.[6] Gartner's duct cysts are usually solitary, unilateral, <2cm in diameter, and are located in the anterolateral vaginal wall of the proximal

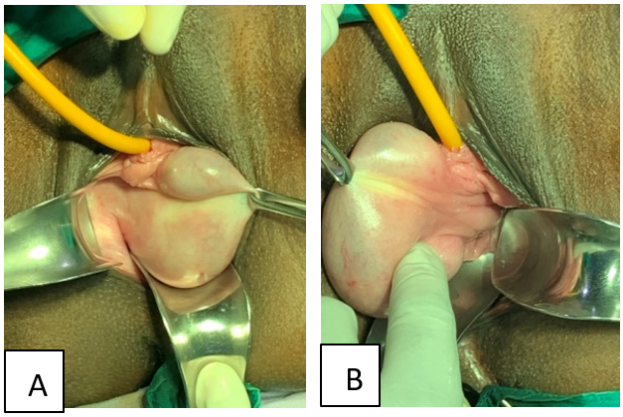

Fig. 2: Extension of base of the mass to **A):** Right lateral wall; **B:** Left lateral wall

Fig. 3: Tip of the bladder sound - palpable within the mass

Fig. 4: Excision of the Gartner's cyst

one-third if the vagina.[7] When the cysts are asymptomatic and small, they can be mananged expectantly[8] as malignant transformation is rare.[9] These can present with a myriad of symptoms like visible palpable mass, dyspareunia, voidng disturbances, vaginal discharge and pain.[8] Differential diagnoses include Bartholin's gland cyst or abscess, Skene's gland cyst or abscess, prolapsed urethra, prolapsed uterus, vaginal wall inclusion cyst, bladder diverticulum, ureterocele, endometriosis, leiomyoma, sarcoma botryoides and malignant mass. Histologically vaginal cysts can be classified as epithelial, inclusion, mullerian, mesonephric, urothelial and other rare types.[9] Thus histopathological examination post surgical excision helps in making the final diagnosis.

3. Conclusion

When Gartner's cysts are huge in size, they mimic pelvic organ prolapse and hence remain untreated for long causing significant morbidity to the patient. A good clinical examination along with radiological investigations will aid in making a timely diagnosis and surgical management.

4. Conflict of Interest

None.

5. Source of Funding

None.

References

1. Pradhan S, Ibbon H. Vaginal cysts: a clinicopathological studyof 41 cases. *Int J Gynecol Pathol*. 1986;5(1):35–46.
2. Eliber KS, Raz S. Benign cystic lesions of the vagina: A literature review. *J Urol*. 2003;170(3):717–22.
3. Shimizu M, Imai T. Vaginal cyst in a newborn. *J Padiat*. 2013;163(6):1790.
4. Merlob P, Bahari C, Libian E, Reisner SH. Cysts of the female external genitalia in the newborn infant. *Am J Obstet Gynecol*. 1978;132(6):607–10.
5. Heller DS. Vaginal cysts: a pathology review. *J Low Genit Tract Dis*. 2012;16(2):140–4.
6. Emmons SL, Petty WM. Recurrent giant Gartner's duct cysts. A report of two cases. *J Reprod Med*. 2001;46(8):773–5.
7. Letizia MJ, Joseph KVM. Case report: Gartner's duct cyst. *Emerg Med News*. 2011;33(5):35.
8. Dwyer PL, Rosamilia A. Congenital urogenital anomalies that are associated with the persistence of Gartner's duct: a review. *Am J Obstet Gynecol*. 2006;195(2):354–9.
9. Bats AS, Metzger U, Frere-Belda MAL, Brisa M, Lecuru F. Malignant transformation of Gartner cyst. *Int J Gynecol Cancer*. 2009;19(9):1655–7.

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