

# Gartner Duct Cyst in an Adult Woman: A Case Report

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## ABSTRACT

Mesonephric cysts are vestigial remnants of the Wolffian duct in female patients. While most of the mesonephric ducts degenerate, some remnants may persist in the mesovarium where they form the

epophoron and paroophoron. The mesonephric cysts (Gartner duct cysts) are seen in 1-2% of the women. Diagnosis is usually made with pelvic examination. Treatment is with surgical excision.

Keywords: Gartner Duct Cysts; Cyst; Wolffian Duct

## INTRODUCTION

Although vaginal cysts are not frequently reported in literature, they are probably more common in daily practice [1]. These cysts may be either congenital or acquired. The squamous inclusion cyst, which is the most common acquired cyst, is usually found at the site of previous surgery, such as episiotomy or trauma. Other acquired cysts include endometriotic cysts, mucinous vestibular cysts, Bartholin duct cysts and Skene duct cysts. Bartholin and mucinous cysts are predominantly derived from the vulva. Congenital cysts may be derived from urogenital sinus (congenital vestibular cyst) or from mesonephric (Gartner duct cyst) or paramesonephric (Mullerian cyst) remnants. Gartner duct cysts are frequently associated with a variety of developmental abnormalities of the urinary tract [2]. Patients may present in childhood or adulthood. Mullerian cyst is the most common congenital vaginal cyst. The others are epidermal inclusion cyst, Bartholin duct cyst, and Gartner duct cyst. Here, we present a case of Gartner duct cyst of vagina in the suburethral area.

## CASE REPORT

A 44-year-old Turkish female presented with vaginal hemorrhage for one month. On physical examination, there was a 4 x 3 cm cystic mass that originated from the superior vaginal wall (Figure 1). Laboratory results were within normal ranges. There was no history of previous surgery. Surgical excision was performed in lithotomy position. The cyst was excised from the normal

vaginal tissue (Figure 2). There was no connection between the cyst and urethra. Pathological examination revealed the cyst to be lined with cuboidal and low columnar epithelium without mucinous formation, consistent with the diagnosis of Gartner duct cyst. Patient was free of any problems at three-month post-operative follow-up.

## DISCUSSION

The mesonephric ducts begin to develop at 20-30 days of gestation and contribute to the development of the male reproductive excretory system that includes vas deferans, epididymis and seminal vesicles [3]. These cysts remain as vestigial structures and are often located in the broad ligaments of the women. The parts of the epithelial lining of these cysts may unusually remain active and continue to proliferate resulting in cystic masses. The Gartner duct cyst is the most common cyst in this group. These cysts usually occur in the anterolateral part of the vagina.

The Gartner duct cysts are lined with a non-mucinous cuboidal or low columnar epithelium. Smooth muscles may be seen around the Gartner duct cyst in pathological examination [1]. Although malignancy is rare, Bats et al [4] reported a case of clear cell carcinoma in a Gartner duct cyst.

The Gartner duct cysts are small and usually diagnosed incidentally. Deppish et al reported that these cysts are measured up to 2 cm [5]. In this series, the patients' age were between 23 and 48 years. Clinical presentation were dyspareunia and urinary symptoms [3]. Gartner cysts can

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**Figure 1:** A 4 x 3 cm cystic mass originating from the superior vaginal wall



**Figure 2:** The cyst was excised from the normal vaginal tissue



easily be diagnosed during pelvic examination. Surgical excision is the mainstay of treatment. Pathological examination is necessary for confirmation of the diagnosis.

#### REFERENCES

1. Heller DS. Vaginal cysts: a pathology review. *J Low Genit Tract Dis* 2012; 16:140-144.
2. Schmidt WA. Pathology of the vagina, In: Fox H, Wells M, eds. Haines and Taylor Obstetrical and Gynaecological Pathology. 5th ed. London, UK:Churchill Livingstone; 2003:147.
3. Akkawi R, Valente AL, Badawy SZA. Large mesonephric cyst with acute adnexal torsion in a teenage girl. *Journal Pediatr Adolesc Gynecol* 2012; 25:143-145.

4. Bats A, Metzger U, Le Free-Beled M, Brisa M, Lecuru F. Malignant transformation of a Gartner duct cyst. *Int J Gynecol Cancer* 2009; 19:1655-1657.
5. Deppisch LM. Cysts of the vagina: classification and clinical correlations. *Obstet Gynecol* 1975; 45:632-637.