

Gartner's Duct Cyst (Wolffian Cyst) Associated with Dyspareunia - Report of a Clinical Case

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Abstract: We report the case of a 40-year-old patient with no notable pathological history (PMH = 0), G3P3 with two living children born by the upper route (cesarean section), currently admitted for an elective cesarean section on a doubly scarred uterus (SU×2), in whom clinical examination revealed a Wolffian cyst (Gartner's duct cyst) associated with dyspareunia. Through this case, we review the embryological, clinical, paraclinical, and therapeutic features of this rare entity and its implications in the obstetric setting.

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I. INTRODUCTION

Gartner's cyst is a rare benign tumor of the vagina, arising from a persistent embryonic remnant of the Wolffian duct. Its name refers to Hermann Treschow Gärtner (1785–1827), a Danish surgeon and anatomist. Although generally asymptomatic, it may in some cases present with significant pelvi-perineal discomfort, particularly dyspareunia, impairing the patient's quality of life. This lesion is found in approximately 1% of all women. Incidental discovery during obstetric follow-up, as in our case, is a classic mode of presentation.

II. CLINICAL OBSERVATION

A 40-year-old patient was admitted to our department for an elective cesarean section. Her medical record showed the following features:

➤ Patient:

- Age: 40 years
- History: no notable medical or surgical pathological history (PMH = 0)
- Obstetric status: G3P3 — three full-term pregnancies, three deliveries by the upper route (cesarean section), three living children
- Current reason for admission: elective cesarean section for a doubly scarred uterus (SU×2: borderline pelvis)
- Functional symptom: deep and superficial dyspareunia reported on interview

➤ On Gynecological Clinical Examination, the Following Findings were Noted:

- A soft, fluctuant cystic mass on the lateral vaginal wall, well-circumscribed and painless on direct palpation
- A swelling perceived near the left antero-lateral vaginal wall

- Abnormal whitish vaginal discharge, odorless
- Deep and superficial dyspareunia confirmed

Speculum examination confirmed the presence of a paravaginal cystic formation, consistent with a Gartner's duct cyst. The cervix was visualized and appeared congested, in keeping with advanced pregnancy.

III. ICONOGRAPHY

- *Figure 1 — External Clinical Appearance (Vulvo-Perineal Examination)*



Fig 1 External View of the Vulvo-Perineal Region

Abundant whitish leukorrhea visible at the vulva — appearance suggestive of associated vaginitis (probable candidiasis). Note the absence of any suspicious cutaneous lesion.

- *Figure 2 Endoscopic Appearance on Speculum Examination (Cervix)*

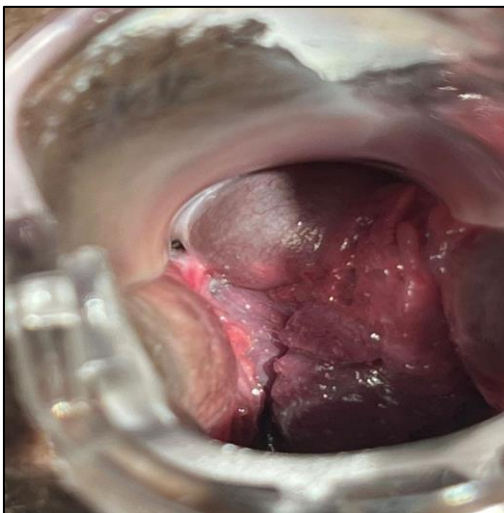


Fig 2 Speculum Visualization

Right paravaginal cystic formation consistent with a Wolffian cyst.

IV. EMBRYOLOGICAL AND PATHOPHYSIOLOGICAL BACKGROUND

In the male embryo, the Wolffian duct is destined to become the vas deferens. In the female embryo, its normal fate is to disappear completely. In rare cases, it may persist as vestigial remnants, generally in the form of small asymptomatic cysts along the former duct pathway on the lateral walls of the vagina.

Hormonal changes, trauma, or infections may contribute to their formation. In the present case, the three prior cesarean sections constitute factors that may favor the persistence or the clinical development of this remnant. In addition, the hormonal changes associated with pregnancy represent a potential aggravating factor.

A. Paraclinical Work-Up

- *Pelvic Ultrasound*

Pelvic ultrasound remains the first-line investigation. It demonstrates an anechoic collection with posterior enhancement at the lateral vaginal wall, corresponding to a rounded lesion of fluid density — an appearance characteristic of Gartner's duct cyst.

B. Clinical Presentation and Symptomatology

These cysts may be discovered in adolescence, on the occasion of painful menses (dysmenorrhea). They may also manifest as abdominal pain and vaginal discharge, urinary bladder symptoms and incontinence, and infections. In our observation, the symptomatology was dominated by disabling dyspareunia, the main functional sign justifying specific management in the postpartum period.

- *The Reported Symptoms Also Included:*

- Dull pelvic pain
- Abnormal whitish leukorrhea (see Figure 1)
- Discomfort on cervical mobilization (see Figure 2)

C. Therapeutic Management

- *Immediate Management — Obstetric*

The patient's current admission was for an elective cesarean section for a doubly scarred uterus (SU×2). The priority management was therefore obstetric. The concomitant discovery of the Wolffian cyst and leukorrhea required a preoperative infectious work-up (vaginal swab, complete blood count, CRP) in order to optimize surgical conditions.

- *Deferred Management — Gynecological*

Surveillance is sufficient in the absence of disabling symptoms. Surgical treatment is indicated only in the case of a persistent symptomatic cyst. In this case, owing to the dyspareunia and functional discomfort, a transvaginal surgical management was performed in the postpartum period.

V. DISCUSSION

Gartner's duct cyst, although benign, can significantly impact the patient's sexual and urinary quality of life. The particularity of this case lies in several points:

- Occurrence in a 40-year-old patient, G3P3, with three prior cesarean sections — repeated pelvic interventions possibly playing a role in the clinical revelation of the cyst.
- Coexistence with an advanced pregnancy (SU×2 — admission for elective cesarean section), requiring a hierarchical approach to management.
- Association with leukorrhea suggestive of superimposed candidiasis (Figure 1), to be treated before any surgical intervention.

VI. CONCLUSION

Gartner's duct cyst is an entity to be familiar with in routine gynecologic practice. Usually asymptomatic, it may be a cause of disabling dyspareunia, leukorrhea, and recurrent urinary tract infections. It should be systematically considered during a lesional work-up and associated urogenital anomalies should be looked for. MRI allows confirmation of the diagnosis. Surgical management remains indicated in the case of persistent symptoms, with a favorable prognosis after vaginal excision.

In our case, the chosen strategy was to prioritize the cesarean section for SU×2, to treat the associated genital infection, and then to perform excision of the Wolffian cyst in the postpartum period.

REFERENCES

- [1]. Gärtner HT. Anatomisk-pathologiske Undersøgelser. 1827.
- [2]. Wikipedia — Gartner's cyst, 2024.
- [3]. Radeos.org — Disease sheet: Gartner's duct cyst.
- [4]. EM-Consulte — Gartner's cyst communicating with the bladder and the vagina, 2008.
- [5]. ScienceDirect — Ultrasound, cystographic, MRI, and endoscopic features of a Gartner's duct cyst, 2008.
- [6]. Imaios.com — Clinical case: Gartner's cyst.