

MULTIPLE GARTNER'S CYSTS FOLLOWED BY RARE PRESENTATION OF COMBINATION OF REACTIONARY AND SECONDARY HEMORRHAGE – A CASE REPORT

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ABSTRACT

INTRODUCTION

Paramesonephric duct or mullerian ducts forms female Genital Organs. The remnant of mesonephric duct or wolffian duct in females Sometimes forms a mesonephric cyst or Gartner's cyst. It is a benign vaginal cyst and may increase in size due to mucus production. Usually noted in routine gynaecological examination.

CONCLUSION

Gartner's cyst though its a simple cyst, is known to occur as a single lesion usually but it can be associated with multiple gartner's cyst. Gartner's cystectomy post procedure can also be associated with post operative complications like, reactionary haemorrhage due to dead spaces especially in cases like ours which had multiple gartner's cyst and secondary hemorrhage due to infections. Taking proper precautions and timely management towards the hemorrhage can drastically save the patient even when landing in dire consequences.

INTRODUCTION

In both males and females, the urogenital system contains two types of ducts, the Wolffian and the Müllerian, which are essential for the reproductive and urinary systems. In females, the Müllerian ducts unite during the eighth week of embryonic development to form the uterus, cervix, and upper vagina. Additionally, during female fetal development, the Wolffian ducts typically regress. However, if they remain vestigial, Gartner's duct cysts may form [1]. Gartner cysts, accounting for approximately 11% of all vaginal cysts, develop from Wolffian duct remnants. They are typically located in the distal half of the anterolateral vaginal wall, near the vaginal vault, between the mucosa and the muscularis propria (2). These cysts are usually asymptomatic, though larger ones may cause dyspareunia or dystocia. Physical examination reveals a clear, cyst-like lump, with multifocal forms being uncommon.

The fetal reproductive tract comprises two components: the male Wolffian duct and the female Müllerian duct. During embryogenesis, hormonal influences cause the Müllerian duct system to develop into the female genital tract (including fallopian tubes, uterus, and upper vagina), while the Wolffian duct system regresses and typically disappears. Occasionally, remnants of the Wolffian system persist. In such cases, the duct—primarily situated between the vagina and cervix (3) consists of mucus-producing cells. It usually lacks continuity with the vagina or uterus, resulting in a closed cystic structure.

CASE REPORT

A 28-year-old female, para2 live2 (P2L2) with two previous lower segment cesarean sections (LSCS), presented with a complaint of vaginal mass for three months. Abdominal examination revealed no abnormalities. Local examination identified a 5×5 cm cystic lesion outside the introitus. Speculum examination confirmed a 5×5 cm cystic lesion arising from the right anterolateral aspect of the vaginal wall.

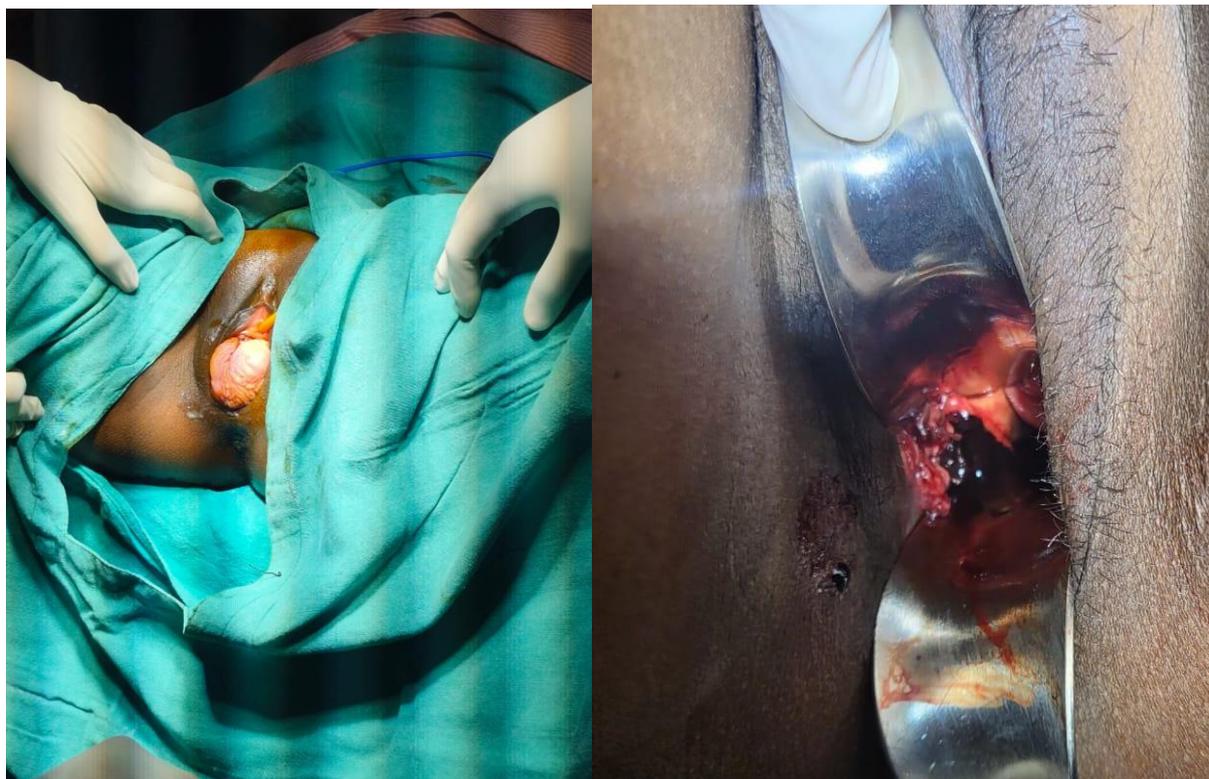
Ultrasound of the abdomen and pelvis demonstrated an anechoic cystic lesion measuring 4.8×4.5 cm with internal septation, originating from the lower vaginal wall. Treatment options included expectant management or surgery. Given the cyst's large size, expectant management was not pursued. The vaginal route was selected for its accessibility, minimal invasiveness, and simplicity.

Cystectomy was performed under spinal anesthesia. Intraoperatively, three closely approximated cysts were identified (measuring 5×5 cm, 3×3 cm, and 1×1 cm). All cysts were excised, and the specimen was sent for histopathological examination. Hemostasis was secured intraoperatively.

Six hours postoperatively, reactionary hemorrhage occurred. Clots (~3×3 cm) were evacuated, and hemostasis was re-established. Injectable tranexamic acid and ethamsylate were administered alongside tight vaginal packing. No active bleeders were identified, and bleeding was controlled.

Antibiotics and supportive care were provided. The patient remained stable until postoperative day (POD) 5, when discharge was advised.

On POD 8, she presented to the emergency department with vaginal bleeding, giddiness, and shortness of breath. Speculum examination revealed ~3×3 cm clots on the right lateral vaginal wall, which were gently removed. Secondary suturing and immediate tight vaginal packing were performed, augmented with absorbable gel and hemocoagulase (Botriclot). Hemostasis was achieved. The patient was discharged on post-procedure day 4 in stable condition with no further complaints.



DISCUSSION

In females, Mullerian ducts form the female genital system whereas Wolffian duct regress and form a vestigial system. This forms the Gartner duct cyst and is typically located in the anterolateral vaginal wall following the course of the duct(4-6). Gartner's duct cyst may present with mass coming out per vaginam. General vaginal examination and transvaginal ultrasound are sufficient for diagnosis. Surgical excision is the mainstay of treatment if they are symptomatic and large(7). Minor procedures like Gartner cystectomy carry risks of reactionary and other hemorrhages due to two key factors:

1. Dead spaces created after cyst removal.
2. Superior positioning of the cyst wall's blind end

Despite suturing to manage dead spaces, reactionary or secondary hemorrhage may still occur. Significant blood loss could lead to anemia and potentially progress to hemorrhagic shock.

Postoperative hemorrhage is a significant potential complication of contemporary gynecological surgery(8).

However, reactionary postoperative bleeding that occurs within the first 24 hours following surgery, commonly within the first 4 hours to 6 hours postoperative, is particularly troublesome, in early recognition and prompt notification of postoperative hemorrhage, and systematic intervention would help avoid poor outcomes(9).

CONCLUSION

Despite meticulous surgical technique to achieve complete intraoperative hemostasis, a very small percentage of patients may still experience reactionary postoperative hemorrhage in contemporary gynecological surgery. The key to successful management is prompt recognition of the complication, immediate emergency resuscitation to control the hemorrhage, and close postoperative monitoring to detect any recurrence of bleeding.

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