CASE REPORT

Large Gartner cyst

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SUMMARY

Gartner cyst is usually an asymptomatic vaginal cyst, measuring less than 2 cm, frequently found during a routine gynaecological examination. Very rarely, as these cysts are closed structures, they may increase in size because of mucus production. We describe here a case of a large Gartner cyst of approximately 8 cm, its differential diagnosis, investigation and vaginal surgical approach (with illustrations), that progressed uneventfully.

BACKGROUND

The reproductive tract in the fetus consists of two parts: one male (Wolffian duct) and one female (Mullerian duct). During embryogenesis, because of hormonal influence, the Mullerian duct system develops to form the female genital tract (including the fallopian tubes, uterus and upper vagina), while the Wolffian duct system regresses, and may eventually disappear. Occasionally a part of this Wolffian system remains. In these cases the duct is located mainly between the vagina and cervix¹ and consists of mucus-producing cells. Usually there is no continuity with the vagina or the uterus, making it, therefore, a closed cystic structure. In most cases, this cyst, called the Gartner cyst is asymptomatic, less than 2 cm in size and is accidentally found during routine gynaecological examination. However, over time, and owing to mucus production, the cyst may enlarge and become symptomatic and/or compress organs like the bladder, urethra or colon.

We think that the description of this case is very interesting, because in addition to the rarity of being an abnormally very large Gartner cyst of approximately 8 cm, with no major clinical symptoms, the kind of surgical approach in these cases is controversial.

INVESTIGATIONS

A 30-year-old woman, nulliparous, during a routine gynaecological examination, was detected having a large tumefaction, non-tender, mobile, fluctuant seeming to have origin on the anterolateral left vaginal wall. Upon speculum examination the cervix had normal appearance. Basic analytical blood test, urinalysis and uroculture were normal. Pregnancy test was negative. Smear test was normal.

She never had urinary or bowel complaints. This woman only referred mild dyspareunia.

The differential diagnosis could include Bartholin's gland cyst, uterine prolapse, cystocele, rectocele, enterocele, urethral diverticulum, endometriosis and malignant growth among others. Given the young age of the patient, tumefaction location and physical examination (painless to

Figure 1 Large Gartner cyst.

mobilisation), we excluded uterine or vaginal walls prolapse, malignant growth and Bartholin's gland cyst. Since it was a very large tumefaction without any urinary complaints or history of urinary tract infections, the urethral diverticulum became an unlikely diagnosis.

For the investigation, we carried out a transvaginal and abdominal ultrasound. We identified a single cystic, fluid-like, avascular area, of approximately 8 cm, independent from bowel or bladder (cystocele or enterocele excluded). As the uterus size and shape

Figure 2 Opening the cyst.

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Figure 3 Output of viscous material.

were normal, ovaries apparently normal, sac of Douglas was free and the tumefaction was painless to touch, endometriosis would be very unlikely. At this point our diagnosis was a large Gartner cyst.

Gartner duct cysts can also be associated with abnormalities of the metanephric urinary system.^{2 3} A reno-vesical ultrasound was performed, looking for urinary tract malformations, but no abnormalities were found.

The patient was proposed for surgery—drainage and marsupialisation of the cyst—which was performed without any complications (see figures 1–7).

Figure 4 Capsule visualisation.

Figure 5 Washing the capsule.

OUTCOME AND FOLLOW-UP

To have more certainty of our diagnosis, we could have subjected the patient to an MRI (higher sensitivity and specificity). But towards the clinic (practically asymptomatic), young age of the patient, normal analytic tests, physical and gynaecological examination (non-tender tumefaction, painless to mobilisation) and ultrasound imaging findings (fluid-like/avascular/cystic tumefaction), the probability of being a Gartner cyst was very high, and so an expensive examination like an MRI did not seem to be justified.

The treatment could be expectant or surgical. Given the large size of the cyst and the young age of the patient we did not decide in favour of expectant management. Regarding the surgical treatment, it could be by vaginal or abdominal approach. We chose vaginal surgery because it seemed more accessible, less invasive and simpler.

Figure 6 Cut of the excess of vaginal wall.

Figure 7 Cerclage of the capsule to vaginal wall.

A postoperative consultation was conducted 20 days after the surgery and another after 6 months. The patient is pleased with the results and, till date, the cyst has not reappeared.

Learning points

- ▶ A large Gartner cyst is a rare situation.
- ▶ Sometimes it can cause only mild symptoms such as dyspareunia.
- ▶ The drainage and marsupialisation of the cyst through the vagina is a simple, safe and effective treatment for patients with surgical indication.

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