

A Mullerian cyst simulating a cystocele

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Abstract

The differentiation of the genital tract and the urogenital sinus is made from, in the embryological stage, 2 types of canals: Wolf's canal which intervenes in male differentiation and Muller's canal origin of female differentiation, in the event of incomplete involution of residues of these canals, they can give in adulthood urogenital cysts responsible for the signs especially if there is a mass effect on the adjacent anatomical structures.

We present a case of a Mullerian cyst, referred as a cystocele: 32-year-old patient admitted for management of an intravaginal mass evolving for 11 years, responsible for pelvic heaviness making sexual intercourse very painful, in whom the examination found a lump next to the anterior vaginal wall, very painful on palpation without any other associated sign, benefited from surgical excision, the anapath of which returned in favor of a Mullerian cyst.

Involution of Wolf's ducts giving cysts called Gartner's cysts and involution of Muller's ducts giving cysts called Muller's cysts. Abstention is required when they are asymptomatic, otherwise the treatment is less invasive surgery.

Keywords: Wolf's canal; Muller's canal; Urogenital cysts; Mullerian cyst

1. Introduction

Urogenital cysts are generally asymptomatic but they can manifest themselves, when they are a little bulky, by a sensation of a mass or a lump in the vagina, dyspareunia or other signs, in particular urinary when they exercise a mass effect on adjacent anatomical structures.

Histologically, they are due to the incomplete involution of the residues of the WOLF or Muller channels. [2]

We present a case of a Mullerian cyst referred as a cystocele.

1.1. Embryological reminder

Differentiation of the genital tract and the urogenital sinus.

1.1.1. The indifferent stage

The genital tract derives from 2 pairs of ducts.

- Wolff's canal (4-6th week): Wolff's or mesonephrotic canals settle outside the mesonephros from its cranial region to its caudal region where they come together in the cloaca.
- Muller's canal (6th week): The Muller's canals are formed on either side of the median line, their first longitudinal portion descends parallel outside the Wolff's canal, a 2nd horizontal portion crosses the canal in

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front of Wolff and unites with its contralateral counterpart on the midline to give a 3rd longitudinal portion: the utero vaginal canal which attaches to the midline of the posterior wall of the primitive urogenital sinus by a closed and thickened zone: the Muller's tubercle.

1.1.2. Male differentiation (7-8th week)

- Wolff's canals: the Wolff's canal regresses in its cranial part and leaves an embryonic residue: the pedunculated hydatid, the part of the Wolff's canal located downstream from the junction of the efferent cones lengthens considerably to form the epididymis. And in front of the epididymis the canal forms the vas deferens, in its distal part it gives the seminal vesicle then continues through the ejaculatory duct.
- Canals of Muller: Regression leaving an upper residue: sessile hydatid and a lower residue: prostatic utricle.

1.1.3. Feminine differentiation

- Wolff's ducts: Wolff's ducts regress and leave embryonic remains: pedunculated hydatid, paroophore, epoophore in the mesovarium and Gartner's organ which is a cystic formation located in the lower part of the vaginal wall.
- 2-Canals of Muller: Differentiation, the 2 longitudinal cranial and horizontal parts give the fallopian tube, the terminal part gives the uterovaginal canal origin of the uterus and the upper part of the vagina.

1.2. Presentation of case

32-year-old patient, with no notable pathological history, G4P4, admitted for PEC of an intravaginal mass evolving for 11 years, responsible for pelvic heaviness making sexual intercourse very painful, patient having benefited from several symptomatic treatments. us by his attending physician for PEC of a cystocele

- Examination: presence of a lump next to the anterior vaginal wall, very painful on non-reducible and fluctuating palpation, not seeming to be at the expense of the bladder.
- Speculum: normal-looking cervix, no leucorrhoea.
- Vaginal examination: no latero uterine tenderness or mass, dead end douglas libre
- Pelvic ultrasound + FCV: unremarkable

Decision of a surgical excision given the symptomatology: longitudinal incision with a detachment of the cyst to the base which was adherent to the urethra then its enucleation with a small breach of the urethra which was sutured at a separate point with the probe in place for 10 days.

Anapath: histologically it is a fibrous wall largely ulcerated and bordered by a focally pluristratified simple cubic epithelium, this wall is remodeled by inflammation, hemorrhage, fibrosis and necrosis,

conclusion: remodeled Mullerian cyst.



Figure 1 Appearance of the preoperative cyst



Figure 2 Excision of the cyst

2. Discussion

Urogenital cystic lesions in women may be the result of:

- an involution of Wolf's ducts giving cysts called Gartner's cysts. These Wolf's ducts in women normally regress except for embryonic remnants: pedunculated hydatid, paroophore, epoophore in the mesovarium and Gartner's organ which is a cystic formation located in the lower part of the vaginal wall rarely observed in adulthood (less than 1% of cysts affecting the vagina) and if they exist, other abnormalities affecting the urinary tract, especially the kidneys, should be sought and ureters [4].
- an involution of the Muller's canals giving cysts called Muller's cysts, these Muller's canals which are at the origin, in the event of female differentiation, the 2 cranial and horizontal longitudinal parts give the fallopian tube, the part terminal gives the utero vaginal canal origin of the uterus and the higher part of the vagina. and in the event of masculine differentiation regress except for a higher residue: sessile hydatid and a lower residue; prostatic utricle. Their persistence following a defect in AMH synthesis or insensitivity to AMH before 8 WA give, in people with a male genotype and phenotype, a rare form of sexual development abnormality characterized by the presence of female structures (uterus, fallopian tubes, proximal part of the vagina) called Müllerian mesonephric duct syndrome. [5]

They should be mentioned among other pathologies when there is swelling in the female genital tract: a cyst of the Bartholin or Skene glands, an endometriotic or myomatous pathology, cystocele, rectocele, elythrocele, [1—3]. In our case, our patient was referred for a cystocele.

3. Conclusion

Clinically, they can be asymptomatic, especially if the size is reduced, but can be troublesome if they become larger and be responsible for the signs motivating patients to consult, among others: dyspareunia, dysuria, pelvic heaviness, recurrent episodes of fluid retention. urine, this is the case of our patient who noticed a gradual change in the size of the cyst caused by heaviness and above all by dyspareunia, prompting the woman to consult.

Concerning the treatment: abstention is required when they are asymptomatic, otherwise the least invasive surgical treatment which is an excision by the vaginal route remains necessary. Our patient benefited from a surgical treatment and sends the part to the anapath whose result confirms a Mullerian cyst.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to disclosed.

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