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SKENE'S GLAND CYST: AN UNCOMMON CLINICAL CASE

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ABSTRACT

Background: Skene's gland cysts, also known as paraurethral gland cysts are uncommon causes of interlabial masses. Diagnosis is usually clinical and is based on their location in relation to the urethra. Standard treatment protocol remains undetermined as such cysts are unusually encountered in uro-gynecologic practice. **Case presentation:** We hereby report an uncommon case of 40-year-old patient who presented with chief complaint of a superficial external dyspareunia. Examination revealed an enlarged right labium majus and a cystic mass adjacent to the urethra which was indicative of a skene gland cyst that was successfully managed by marsupialization. **Conclusions:** The diagnosis of a Skene's gland cyst can be made clinically. Yet, a thorough uro-genital evaluation consisting of a complete physical and radiological examination is of paramount importance to rule out differential diagnoses. There is no clear consensus on their standard management; however, surgical treatment has been described as the preferable method in symptomatic cysts.

KEYWORDS: Skene's gland, Cystic mass, Paraurethral cyst.

BACKGROUND

Skene's glands are paired structures that develop from the urogenital sinus.[1] They are the female homologues of the prostate in the male and secrete a mucoid material with sexual stimulation.[1,2] These glands are located near the external urethral meatus with ducts draining into the urethral lumen. Obstruction of these ducts leads to the formation of cyst.[3]

Skene's gland cysts are most commonly present in the third to fourth decades.[3] Their exact etiology remains unknown, although obstruction of Skene's duct as a result of infection or inflammation, or mechanical trauma has been reported.[2,3]

They present as a small, yellow or whitish inter-labial mass and are diagnosed by physical examination. The management of these cysts is a controversial topic because of their benign nature and the chance of spontaneous regression. However, surgical intervention is indicated mainly in symptomatic cases.[3-5]

Our goal is to explore the clinical features, diagnosis, and management of Skene's gland cyst. For this purpose, we report the case of a 40 year old woman who presented a cystic mass adjacent to the urethra which was indicative of a Skene duct cyst that was successfully treated by marsupialization.

CASE REPORT

We hereby report an uncommon case of a 40-year-old woman, with no particular pathological history, who presented to the gynecological outpatient department at our institution complaining of superficial external dyspareunia and a rapidly progressive interlabial mass. She reported no fever, abnormal vaginal discharge or urinary tract symptoms apart from the deviation of the urinary stream.

Examination of the external genitalia revealed a 4 cm cystic mass of soft consistency located on the right side of the urethral meatus with a deviation of the urethra to the left side. This localization was indicative of a skene's gland cyst. [Figure 1]

Laboratory investigations including renal function tests and a complete blood count were all normal. STD work-up was negative. Urinary and pelvic ultrasounds and voiding cystourethrography were normal as well.

Urethral catheterization was done and the cyst was treated by marsupialization. This included a circular incision on the vaginal epithelium overlying the cystic gland; the vaginal epithelium and the cystic wall were marsupialized using 3-0 Vicryl with multiple interrupted stitches. The microscopic evaluation of the drained mucoid fluid was normal and no bacterium was detected on culture. Histopathology confirmed the diagnosis of a benign cyst.

The postoperative course was uneventful. No recurrence was observed within 1 year after treatment.

Figure 1: Skene's gland Cyst.

DISCUSSION

Discovered by Alexander Johnston Chalmers Skene in 1880,[6] Skene's glands are the largest paraurethral glands that are located in the distal urethral floor.[5,6]

Skene's gland cysts are believed to occur due to the obstruction of the glandular ductus as a result of infection or inflammation or mechanical trauma.[5]

Their diagnosis can be made by obtaining history and physical examination. Thus, patients present with a paraurethral mass in association with symptoms of urinary tract infection, dyspareunia, and obstructed or dysfunctional voiding. On physical examination, the cyst is focally tender and when pressure is applied, clear or purulent fluid can be expressed. In cases where the diagnosis is in doubt, further workup with cystourethroscopy, MRI, voiding cystourethrogram, or transvaginal ultrasonography may be warranted to rule out differential diagnoses including urethral diverticula which are usually midurethral in location, urethral prolapse, Bartholin cyst, Gartner's duct cyst or abscess.[5-7]

Martin et al.[8] described four cases of Skene's gland cyst with chief complaints of dysuria, dyspareunia, and sensation of a mass in their urethra.

In our case, the characteristic localization at the paraurethral area and displacement of the urethral meatus by the mass confirmed the suspicion of Skene's gland cyst.

Due to their infrequent nature, very little information is available in the literature regarding management of Skene's gland cysts. Different therapeutic options are possible.

Conservative management may include antibiotic therapy or waiting for spontaneous rupture. This approach is advisable in asymptomatic cases only.[9]

Surgical management involves surgical excision and ablation, incision and drainage, marsupialization, or simple needle aspiration.[9,10] We considered that marsupialization was the adequate treatment in view of the size of the cyst presented in our case and since it is a safe procedure with acceptable long-term functional outcomes.

The few rare cases reported in the literature suggest that surgical treatment is the preferred method for symptomatic cysts.[8,10] Our patient was symptomatic and underwent surgical treatment which consisted on performing marsupialization. This latter is considered to be the treatment of choice to avoid urethral complications. Contrary to Excision, which is a delicate operation that can lead to distal urethral wall damage.

In our case, the postoperative course was uneventful and no complication was observed. Moreover, histopathological findings were consisted with the presumptive clinical and surgical diagnosis with typical benign cells appearances.

CONCLUSIONS

Skene's gland cyst is a relatively rare entity that can significantly affect patient's quality of life. The protocol for diagnosis and management of these lesions is still unclear, however, symptomatic cysts may warrant surgical treatment, usually with excellent outcome.

ABBREVIATIONS

STD: sexually transmitted diseases

MRI: Magnetic resonance imaging

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Guarantor of Submission

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Supporting material is available if further analysis is needed.

Competing interests

The authors declare that they have no competing interests.

Consent for publication

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Ethics approval and consent to participate

Ethics approval has been obtained to proceed with the current study. Written informed consent was obtained from the patient for participation in this publication.

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