Journal of Midwifery & Reproductive Health

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Female Urethral Condyloma Acuminata Causing Lower Urinary Tract Symptoms: Report of Two Cases

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ARTICLE INFO

Article type:
Case report

Article History:
Received: 15-May-2023
Accepted: 05-Mar-2024

Key words:
Condylomata Acuminata
Urethra
Lower Urinary Tract Symptoms

ABSTRACT

Background & aim: Female urethral involvement is rare in Human papillomavirus (HPV) infections, even though HPV is the most common sexually transmitted disease globally.This case report aimed to present two unusual cases of HPV infection of the female urethra, which caused lower urinary tract symptoms.

Case report: A 45-year-old single woman was referred complaining of mass protrusion from the urethral meatus, incomplete voiding, and dysuria in the last three months. Physical examination revealed a papillary pink mass about 0.5×1 cm in diameter around the external urethral meatus. A surgical excision was performed. Pathological evaluation revealed condyloma acuminatum. The next case was a 41-year-old married woman referred to the clinic with a complaint of dysuria. Physical examination revealed a purple urethral mass about 0.5×0.5 cm in size. A surgical excision was performed, and histopathological evaluation showed condyloma acuminatum. After two months of follow-up, they had no recurrent lesions or symptoms.

Conclusion: Female urethral condyloma acuminata may cause lower urinary tract symptoms. Surgical excision of urethral condyloma is an effective treatment.

▶ Please cite this paper as:
Pourali L, Sheikhi Zh, Hosein Jafarian A, Armanpour S, Vatanchi A. Female Urethral Condyloma Acuminata Causing Lower Urinary Tract Symptoms: Report of Two Cases. Journal of Midwifery and Reproductive Health. 2026; 14(1): 5286-5290. DOI: 10.22038/jmrh.2024.72431.2121

Introduction

HPV is a widespread sexually transmitted disease, with more than 200 different types identified globally (1). Of these types, over 40 can be transmitted through sexual contact and infect the anogenital region (2). Human papillomavirus (HPV) spreads through contact with infected skin or mucosa, entering cells of the epidermal basal layer through tiny abrasions. It is essential to know that anogenital HPV infection is almost always contracted through sexual contact. Although warts are not necessary for transmission, they are highly infectious because of their high viral load. Around 90% of anogenital warts are linked to HPV types 6 and 11, which have low oncogenic potential (3). For most patients, the presence of genital warts is concerning because of their cosmetic appearance, association with a sexually transmitted disease, bothersome symptoms, absence of a cure, and social stigma (4).

Male urethral involvement is joint in external anogenital warts, but female urethral involvement is rare (5,6). This case report aimed to present two cases of female urethral condyloma acuminata (CA), which causes lower urinary tract symptoms.

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Case presentation

Case 1

A 45-year-old woman visited the pelvic floor clinic of Ghaem Hospital in October 2021. She was experiencing a protrusion of mass from the urethral meatus, as well as incomplete bladder emptying, dysuria, and frequent urination for the past three months. These symptoms significantly impact her quality of life. She divorced and denied any sexual activity since last year. The past medical history showed previous herpes simplex infection in the vulvar region. The pap smear was normal. Physical examination revealed a papillary pink mass about 0.5×1 cm in diameter around the external urethral meatus without ulceration or discoloration during the time (Figure 1).

Figure 1. Papillary pink mass in peri urethral area

Other vulva vaginal examinations were normal. Post-voiding residual volume was 40 milliliters. She had no history of anogenital wart. Urine culture was normal. The cystoscopic evaluation showed normal bladder and urethral findings. Surgical excision of the urethral mass was performed. Pathological evaluation revealed condyloma acuminatum (Figure 2, A.B).

Figure 2 (A). Slides show squamous epithelium with acanthosis , Papillomatosis , hyperkeratosis and koilocytic changes. HE staining ×100

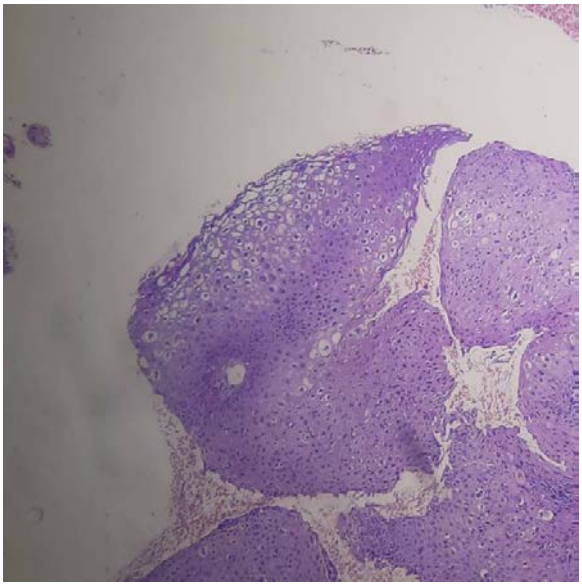

Figure 2 (B). Slides show squamous epithelium with acanthosis , Papillomatosis , hyperkeratosis and koilocytic changes. HE staining ×100

Four weeks after the surgery, the external meatus was expected, and the patient reported complete relief from the symptoms. At 3, 6, and 12-month follow-up visits, she had no symptoms of recurrence.

Case 2

A 41-year-old married woman was referred to the urology clinic of Ghaem Hospital in November 2021, complaining of dysuria. She didn't have any other lower urinary tract symptoms like voiding dysfunction or frequency, but the severity of the symptoms caused many problems with daily activity. She was sexually active without any contraceptive method and had a history of 3 expected vaginal delivery. Physical examination revealed a purple urethral mass about 0.5×0.5 cm in size (Figure 3). Another vulvovaginal examination was regular, and she had no history of anogenital wart. The pap smear was normal. Again, after evaluation for another sexually transmitted disease, surgical excision was planned. Histopathological evaluation showed condyloma acuminatum. After 2, 6, and 12-month follow-up visits, she had no recurrent lesions or bothersome symptoms. Informed consent was obtained from the patients to publish the information and related images.

Figure 3. Purple urethral mass

Discussion

In cases of external anogenital warts, there is a chance that cervix or urethra may also be affected (2). Condylomata acuminata, also known as genital warts, can also appear in the anal canal. These warts are generally small, flat-topped, or globoid-shaped papules and are usually located distal to the dentate line. When the warts spread extensively in the anogenital area, they can cause significant disfigurement and interfere with defecation (7).

External anogenital warts are usually located on the vulva, perineum, anal, or suprapubic skin. It is rare for the cervix or female urethra to be affected. However, in the present cases, the individuals had no prior history of anogenital warts but had previously contracted other STD infections like HSV and trichomonas infections. Urethral involvement is not common, but when it occurs, it usually affects the external meatus or the proximal sites within the urethra, as seen in the presented cases (6). Urethral warts can cause urethral bleeding, including bleeding during sexual intercourse and, in rare cases, urinary obstruction (8), which is the same symptom observed in the current instances.

Bladder outlet obstruction is a rare complication and is only reported in some previous case reports; Ondar et al. (2016) reported a case of urinary retention with urethral condyloma (6). On the other hand, it may cause frequency, urgency, and incomplete bladder emptying, which are symptoms of the current cases.

If the diagnosis is uncertain, a biopsy should be performed, mainly if there are atypical features (9). The main reason for treating vulvovaginal warts is to relieve troublesome symptoms or psychological distress (10). The ultimate aim of treating warts is to remove them, but eliminating the viral infection from the body is not feasible. The effectiveness of genital warts treatment in reducing the transmission of HPV is yet to be ascertained. The choice of treatment approach depends on various factors, such as the location and size of the warts, their number, the cost, efficiency, convenience, and possible side effects (11).

However, most topical treatments could be applied for vulvar lesions, but in sensitive areas like the vagina, only specific medication can be used (10). Local excision has better results than any other energy-based ablative methods (12). Like in a previous study, we performed a condyloma excision, and the result was optimal in terms of early recovery and symptom relief (6). Although with treatment warts can be removed, recurrence is expected in 20-30% of patients (13).

Younger age at treatment and multifocal lesion treatment are associated with recurrence (14). Combining techniques is often effective for patients with multifocal or refractory disease (15). Currently, there are no established guidelines for surveillance after the treatment of genital warts. Follow-up appointments are scheduled based on the patients' symptoms and their satisfaction with the treatment outcomes. Patients who experience recurrent or refractory disease are typically diagnosed within three to six months after the therapy (15). Our patients were symptom-free with routine physical examinations at 3, 6, and 12-month follow-up visits.

Conclusion

Female urethral condyloma may cause lower urinary tract symptoms like dysurea, frequency, urgency and also voiding dysfunction. Surgical excision of urethral condyloma is an effective treatment.

Declarations

Acknowledgements

We are thankful to the staff of Ghaem Hospital for their cooperation in this study.

Conflicts of interest

The authors declared no conflicts of interest.

Ethical considerations

The informed consen was obtained from the patients to report the results.

Code of ethics

None.

Use of Artificial Intelligence (AI)

We acknowledge the use of ChatGPT (Open AI) to improve the clarity and language of manuscript.

Funding

None aplicable.

Authors' contribution

LP conducted patients' management and manuscript drafting, ZS participate in patients' care and management, AHJ performed pathological analysis, SA helped in patients' follow-up, Atiyeh Vatanchi contributed to patients' follow-up and manuscript drafting.

References

1. De Camargo CC, Tasca KI, Mendes MB, Miot HA, de Souza Ldo R. Prevalence of Anogenital Warts in Men with HIV/AIDS and Associated Factors. Open AIDS Journal. 2014; 8: 25-30.
2. Prevention of genital HPV infection and sequelae: report of an external consultants' meeting. Atlanta, GA: Centers for Disease Control and Prevention. Available at: www. cdc.gov/ std/hpv/hpvsupplement99.pdf (Accessed on February 08, 2016)
3. Aubin F, Prétet JL, Jacquard AC, Saunier M, Carcopino X, Jaroud F, et al. Human papillomavirus genotype distribution in external acuminata condylomata: a Large French National Study (EDiTH IV). Clinical Infectious Diseases. 2008; 47(5): 610-615.
4. Steben M, LaBelle D. Genital warts: Canadians' perception, health-related behaviors, and treatment preferences. Journal of lower Genital Tract Disease. 2012; 16(4): 409-415.
5. Hamano I, Hatakeyama S, Yamamoto H, Fujita T, Murakami R, Shimada M, et al. Condyloma Acuminata of the Urethra in a Male Renal Transplant Recipient: A Case Report. Transplantation Proceedings. 2018; 50(8): 2553-2557.
6. Cinar O, Bolat MS, Akdeniz E, Sahinkaya N. A rare cause of acute urinary retention in women: meatal condyloma accuminata, a case report. Pan African Medical Journal. 2016; 24(1).
7. Cone MM, Cone MM, Whitlow CB. Sexually transmitted and anorectal infectious diseases. Gastroenterology Clinics. 2013; 42(4): 877-892.
8. Chae JY, Chae JY, Bae JH, Yoon CY, Park HS, Moon DG, Lee JG, Oh MM. Female urethral condyloma causing bladder outlet obstruction. International Neurourology Journal. 2014; 18(1): 42.
9. Jones HW, Rock JA. TeLinde's Operative Gynecology.12th edition. Philadelphia: Wolters Kluwer, 2020. P.1080.
10. Workowski KA, Bolan GA; Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. MMWR Recommendations and Reports 2015 Jun 5;64(RR-03):1-137.
11. Berek JS. Berek and Novak's Gynecology. 16th ed. chapter 16. Francisco Garcia, Kenneth D. Hatch, Jonathan S. Berek Lippincott Williams & Wilkins: 2020. P. 386.
12. Fathi R, Tsoukas MM. Genital warts and other HPV infections: established and novel therapies. Clin Dermatol. 2014; 32(2): 299-306.

13. Stern PL, van der Burg SH, Hampson IN, Broker TR, Fiander A, Lacey CJ, Kitchener HC, Einstein MH. Therapy of human papillomavirus-related disease. Vaccine. 2012; 30: F71-F82.
14. Widschwendter A, Böttcher B, Riedl D, Coban S, Mutz-Dehbalaie I, Matteucci Gothe R, Ciresa-König A, Marth C, Fessler S. Recurrence of genitals warts in pre-HPV vaccine era after laser treatment. Archives of Gynecology and Obstetrics. 2019; 300(3): 661-668.
15. Puviani M, Galluzzo M, Talamonti M, Mazzilli S, Campione E, Bianchi L, Milani M, Luppino I, Micali G. Efficacy of sinecatechins 10% as proactive sequential therapy of external genital warts after laser CO2 ablative therapy: The PACT study (post-ablation immunomodulator treatment of condylomata with sinecatechins): a randomized, masked outcome assessment, multicenter trial. International Journal of STD & AIDS. 2019; 30(2): 131-136.