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Condyloma of the Male Urethra: Clinical Case, Diagnostic and Therapeutic Challenges

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1. Abstract

Human papillomavirus (HPV) can cause lesions on the external genital organs, which are typically benign. Condylomas located within the urinary tract are rare, and their recurrence can pose diagnostic challenges, especially in differentiating them from malignant tumors of the urinary tract. We report a case of urethral condyloma managed surgically in our department, with a favorable outcome.

2. Introduction

Condylomas or papillomas are benign lesions caused by HPV. Genotypes 6 and 11 are responsible for 90% of cases and have low oncogenic potential, in contrast to the less common but highly oncogenic genotype 18 [1]. Sexual contact is the primary mode of transmission. HPV can cause lesions on the external surfaces of the genital organs [2, 3]. Urethral localization is very rare and can present diagnostic and therapeutic challenges [4]. We report a case of male urethral condyloma managed in our department.

3. Case presentation

A 30-year-old, single, circumcised male with a history of unprotected sexual intercourse was presented with a budding mass at the urethral meatus, associated with dysuria and slight deviation of the urinary stream. The condition had been evolving over 8 months.

The patient reported two previous attempts at excision 3 and 5 months earlier, with rapid recurrence of the lesion. Physical examination revealed two pedunculated, non-bleeding, budding lesions, approximately 0.5 cm in diameter with a characteristic "cock's comb" appearance (Figure 1). The lesions were located laterally in the intraurethral area, about 1 cm from the meatus. No other external or internal lesions were found. Urine cytobacteriological examination revealed no microorganisms or microscopic hematuria. Serology tests for HPV and HIV were negative. Urethrocystoscopy was normal except for the described lesions.

Given the recurrence, size, and location of the lesions, we opted for excision via open surgery. For better exposure, we performed a 1 cm incision from the urethral meatus towards the median raphe of the glans. Each lesion and its implantation base were excised en bloc using cold scalpel excision, followed by careful hemostasis. The incision site was sutured with a U-stitch over a 20 French urinary catheter. The catheter was removed on postoperative day 10. No recurrence was noted after 12 months, and the patient experienced normal urination with a good urinary stream (Figure 2). Histological examination of both specimens confirmed condyloma with low-grade dysplasia, and the surgical margins were clear (Figure 3 and 4).

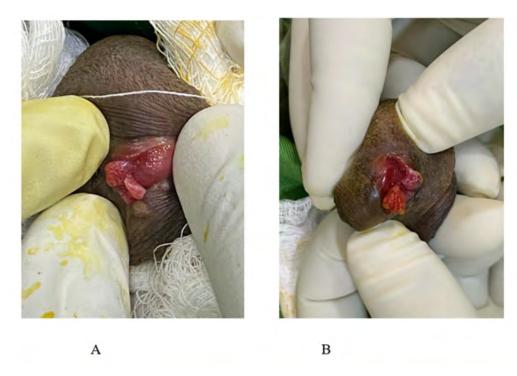


Figure 1: Condyloma of the anterior urethra, "cock's comb" appearance



Figure 2: Urethral meatus post-excision of condylomas, A: Day 10 post-surgery after catheter removal et B: Year 1 post-surgery

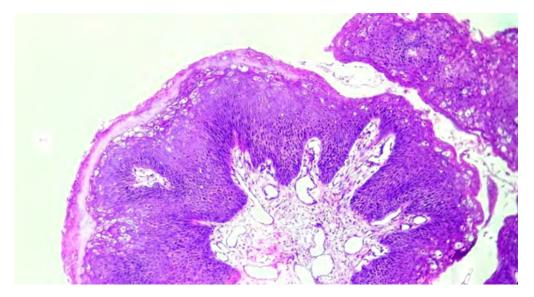


Figure 3: HE (x100) Microscopic examination of the condyloma showing a parakeratotic, acanthotic, and papillomatous squamous epithelium without architectural disorganization.

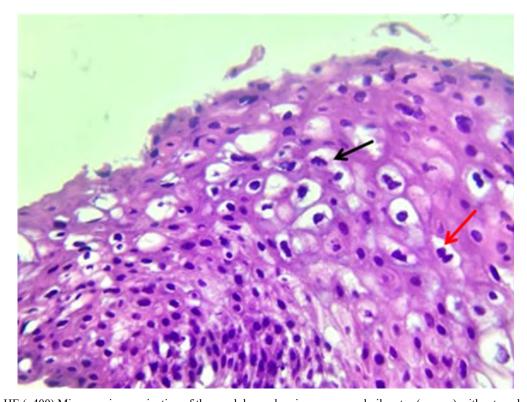


Figure 4: HE (x400) Microscopic examination of the condyloma showing numerous koilocytes (arrows) without nuclear atypia.

4. Discussion

HPV infection is a sexually transmitted disease that can lead to the development of condylomas. These lesions typically appear as small, fleshy, flexible masses with a verrucous surface, usually located on the external genitalia or perianal region [2, 5]. Urethral localization is extremely rare. Our patient presented with two typical intraurethral condylomas [4, 6]. The negative serology may be due to his late consultation. However, urethral condylomas are benign tumors, and complete excision should not result in recurrence [6, 7]. The patient's reported double recurrence prior to presentation

posed both diagnostic and therapeutic challenges. On the diagnostic side, urethral exophytic lesions could suggest urethral carcinoma, especially since HPV genotypes 16 and 18 are known to cause condylomatous lesions that may progress to malignancy[1, 5, 8]. Moreover, the exact mapping of the lesions was unknown. Hidden lesions could exist behind the external mass at the urethral meatus, justifying the need for urethrocystoscopy to accurately define the extent of the lesions and rule out internal involvement. On the therapeutic side, recurrence may result from incomplete excision of the lesions due to their location, suggesting the need for a

more appropriate surgical technique. While invasive, our surgical approach addressed both the aesthetic and functional impact of the lesions on urination. The postoperative course was uncomplicated, and the patient was satisfied with the outcome. Histological analysis of the excised tissue confirmed the absence of malignancy and revealed urethral condylomas [2, 5, 9]. The clear surgical margins explain the absence of recurrence after 12 months of follow-up.

5. Conclusion

Urethral condylomas are rare benign lesions. Their location and recurrent nature may require surgical management. Although invasive, surgical intervention can yield highly satisfactory results.

6. Declarations

The authors declare that they have no conflict of interest with this article. The patient gave his consent for the publication of this article.

References

- Breugelmans JG. Épidémiologie, prise en charge thérapeutique et impact économique. In: Traité des infections et pathologies génitales à papillomavirus. Paris: Springer Paris; pp.385–391.
- Velez Torres JM, Zhao J, Epstein JI, Kryvenko ON. Condyloma acuminatum of the urinary tract demonstrates atypical squamous cells in urine cytology. Hum Pathol. 2022; 130: 110–16.
- Gammon DC, Reed KA, Patel M, Balaji KC. Intraurethral fluorouracil and lidocaine for intraurethral condyloma acuminata. Am J Health Syst Pharm. 2008; 65(19): 1830–33.
- Chae JY, Bae JH, Yoon CY, Park HS, Moon DG, Lee JG, et al. Female Urethral Condyloma Causing Bladder Outlet Obstruction. Int Neurourol J. 2014; 18: 42.
- Kouamé YE, Bolasade AT, Noël C. Un cas de papillome urétral a HPV observé au service d'urologie de Treichville. Rev int sc méd Abj -RISM-2021;23,4:365-367.
- 6. Brummeisl W, Lausenmeyer E, Weber F, Brundl J, Fritsche H-M, Burger M, et al. Urethrale Condylomata acuminata. Urologe A. 2015; 54: 378–84.
- 7. Chae JY, Bae JH, Yoon CY, Park HS, Moon DG, Lee JG, et al. Female Urethral Condyloma Causing Bladder Outlet Obstruction. int Neurourol J. 2014; 18 (1): 42-4.
- Timm B, Connor T, Liodakis P, Jayarajan J. Pan-urethral condylomata acuminata – A primary treatment recommendation based on our experience. Urol Case Rep. 2020; 31: 101149.
- Keating MA, Young RH, Carr CP, Nikrui R, Heney NM. Condyloma Acuminatum of the Bladder and Ureter: Case Report and Review of the Literature. J Urol. 1985; 133(3): 465–67.