Functional medicine

A case of condyloma acuminate after about 30 years of urinary obstructive symptoms

Negar Behtash a, Seyed Mohammad kazam Aghamir b, Seyed Saeed Tamehri Zadeh b, Fateme Guitynavard b,*

a Tehran University of Medical Sciences, Tehran, Iran
b Urology Research Center, Sina Hospital, Tehran University of Medical Sciences, Tehran, Iran

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Key Messages
Condyloma acuminate (CA), in a woman with AUR should be kept in mind if the routines work-up do not reveal the cause of AUR.

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ABSTRACT

Condyloma acuminate (CA) is a warty lesion caused by human papilloma virus (HPV) mostly involve the external genitalia. A 65-year-old woman with a compliant of acute urinary retention came to our hospital emergency ward and the retention was resolved by placing a 6 Fr Foley catheter. On physical examination warty lesions on patient’s urethral meatus was seen and biopsy was taken. The pathology confirmed the diagnosis of CA. 5-FU was prescribed for a month and the outcome was fully satisfactory. To sum up, CA in female with AUR should be kept in mind.

Introduction

Among sexually transmitted diseases, human papillomavirus (HPV) has the highest prevalence with and incidence of 6.2 million people each year in the United States. With advancement in virus detection methods, so far, over 200 HPV strains have been identified; however, few of them are considered as oncogenic types, which mainly are type 16 and 18. Condyloma acuminate (CA) is one of the genitalia infection’s manifestations that caused by HPV 6 and 11. Here we are presenting a rare case because it has the urinary obstructive symptoms for about 30 years. Rarely, CA involves urological system, that often would be observed in patients who are immunodeficient, or had a history of CA of genitalia.

Case presentation

A 65 years-old woman came to emergency department of Sina Hospital with acute urinary retention (AUR). She has been suffering from decrease in urine force, and calibration for the last 30 years and also, she mentioned some degree of urinary dribbling. All the symptoms have been worse over time and she was unable to void for about 24 hours. AUR was virtually resolved by inserting 6Fr Foley and about 800 cc was evacuated. The patient underwent cystourethroscopy and a circumferential lesion with 1cm length was observed in distal of urethra and no involvement of other sites was detected and the lesion was biopsied. However, cystoscopy could not be performed due to the severity of urethra stricture. The 6Fr Foley catheter was placed again and cystoscopy was done for the patient after 1 month. The result of cystoscopy was trabeculation, 2 giant diverticula, high PUR, the bladder wall thickening, and no lesion was found in the bladder. The histopathological findings of lesion confirmed the diagnosis of CA and no evidence of malignancy was seen (Figs. 1 and 2). The strain of HPV was identified by immunohistochemistry, which fortunately was type 6. The patient and her husband were tested for HIV, HBV, and HCV and the results were negative for both.

Discussion

The involvement of urethra in CA is not as frequent as other sites and only involves in 20% of cases, of which 80% belongs to urethra. Regarding risk factors of meatus CA, the role of meatus size has been postulated and for meatus with larger size, higher risk of CA can be expected. With decreasing the possibility of getting infected with HPV, meatus CA likelihoods would be decreased in parallel and for achieving this purpose, hindering dangerous sexual activities are recommended.
CA is a well-known sexual transmitted disease that commonly appears as exophytic and gross lesions. CA has attracted a great attention due to notable rise in incidence of it and predict near 2–3 million of new cases every year worldwide. While the mechanism behind urinary involvement is yet to be clear, it is thought to be as a result of secondary extension from anogenital lesions, that is in support with the higher odds of CA in female given shorter urethral length. Although some claims that catheterization and urethral procedures contribute to CA in patients with no history of CA, the reasonable explanation for those has been challenging and no certain reason has been found. Our patient did not mention any history of catheterization or surgical procedure, which is opposed to that theory.

The histopathological findings of CA have been recognized decades ago, which are characterized by acantosis, papillomatosis, parakeratosis, and koilocytosis. Verrucous carcinoma is well-differentiate squamous cell carcinoma with pathological features similar to CA, Hence, usually distinguish between them is difficult and the absence of a central connective tissue is often in favor of verrucous carcinoma. The pathology of patient lesion showed papillomatous shape of epithelium, koilocytosis of the Malpighian epithelium and also, lymphocytic infiltration of the stroma and vascularized connective tissue were presented. Urinary tract lesion biopsy showed no signs of malignancy and was in consistent with CA.

As mentioned above, the association between HPV and CA is beyond the doubt. Furthermore, the implication of HPV in different malignancies has been proven. It was hypothesized that may HPV be responsible for bladder cancer in young aged patients and wide ranges of HPV’s prevalence have been reported from 0 to 80%. Several literatures stated that high risk strains of HPV with origination of meatus CA, may induce bladder cancer by ascending to urethelium of the bladder. Consequently, not urinary tracts but also the bladders are in malignancy danger in patients with urethral meatus CA.

Despite many years of experience with respect to meatus CA’s treatment, the satisfactory results have not been reached owing to the inevitable treatment-related complications primarily urethral stenosis, massive bleeding, infection, which worsen the patient’s condition more than before and often accompanied by traditional methods. Additionally, hidden lesions and small ones may account for removing all lesions is not possible all the time, hence, remaining lesions rise the recurrence frequency.

The applicability of a variety of surgical and non-surgical treatments have been investigated, but not limit to, such as 5-fluorouracil (5-FU), photodynamic therapy with 5-aminolaevulinic acid, surgical excision, cryotherapy, and laser therapy. The studies that have used 5-FU as choice solitary or in combination with surgery, are not significant. 5-FU was pertained in 20 patients with urethral CA and after 6 months of follow-up, the efficacy of it was 95% and only 1 patient did not response to it completely, which was due to the critical location of CA and necessitated fulguration. The sides effect of 5-FU can be overlooked and consist of irritation of meatus and dysuria. We applied 5-FU with cotton applicator after every voiding and every night for whole 1 month and the patient responded to that dramatically and all the lesions were disappeared.

**Ethics approval and consent to participate**

Patient consent undertook before surgery based on the ethical code of Tehran University of Medical Sciences Ethics committee.

**Consent for publication**

The information is published without the name of patients.

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Declaration of competing interest

All authors claim that there is not any potential competing or conflict of interest.

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Fig. 2. Cytography.