

Condyloma acuminata on the nipple and coronary sulcus of the penis

A case report

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Abstract

Rationale: Condyloma acuminatum (CA) is a benign tumor primarily caused by infection with human papillomavirus (HPV) type-6 or type-11, lesions of which are most frequently found on the genital and perianal squamous mucosa and skin. CA outside the genitals is not common.

Patient concerns: A 29-year-old male presented with lesions on the left nipple and coronary sulcus after heterosexual contact.

Diagnoses: Histopathological examination and HPV detection made a definite diagnosis of CA.

Intervention: The patient was treated with microwave and topical imiquimod cream.

Outcomes: After 6 months follow-up, there was no sign of recurrence.

Lessons: This case shows that we should pay more attention to CA outside the genitals in the process of diagnosis and treatment.

Abbreviations: CA = condyloma acuminatum, HPV = human papillomavirus.

Keywords: condyloma acuminatum, HPV, nipple

1. Introduction

Condyloma acuminatum (CA) is a common sexually transmitted disease among males and females caused by human papillomavirus (HPV).^[1] HPV is usually cleared within two years of infection, but it is possible for a latency period to occur, with the first occurrence or a recurrence happening months or even years later.^[2] Although, CA can occur on genital and perianal sites through sexual contact, it can also be found outside the genitals by oral-genitals or oral-nipple contact.^[3] Here, we report an uncommon case that a male infected with CA on the nipple and coronary sulcus.

2. Case report

A 29-year-old male presented with a one-month history of some papillary lesions on the coronary sulcus. One year ago, the

patient noticed a cauliflower lesion on the left nipple, which presented reddish, fleshy, no pain, and no itch. Initially, the lesions were ignored because they grew slowly. One month ago, his wife found some papillary lesions on the vulva. At the same time, he noticed the similar lesions in his coronary sulcus. In the last year, the patient usually had oral-oral, oral-vulva, oral-anus, oral-nipple, and even hand-nipple contact with his partner. The patient was otherwise healthy and had no history of sexually transmitted diseases.

A physical examination revealed some small whitish papillary lesions around the coronary sulcus (Fig. 1). A 5 mm cauliflower-like wart was found on the left nipple (Fig. 2). The biopsy specimens were excised from the lesion of left nipple and coronary sulcus under local anesthesia. Histopathological examinations (Figs. 3 and 4) revealed massive epidermal hyperplasia, hyperkeratosis, parakeratosis, and koilocytosis, which were consistent with the diagnosis of CA. Polymerase-chain-reaction assay for HPV DNA revealed an infection with HPV type 11.

Based on the above evidences, a definite diagnosis of CA on the nipple and coronary sulcus could be determined. The patient was treated with microwave twice and topical imiquimod cream for two weeks. There was no sign of recurrence within one year.

3. Discussion

CA is a benign tumor primarily caused by infection with HPV type-6 or type-11.^[4] CA is spread through direct skin-to-skin contact with an infected individual, usually during sex.^[5] Lesions of CA are most frequently found on the genital and perianal squamous mucosa and skin infected through sexual contact.^[6,7] They can also infect lips, oral cavity, and even other sites outside the genitals through oral-genitals contact. In recent years, some atypical cases of CA occurring at sites like the breast,^[8] tongue,^[9] or groin^[10] have been reported.

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Figure 1. Condyloma acuminatum on the coronary sulcus.

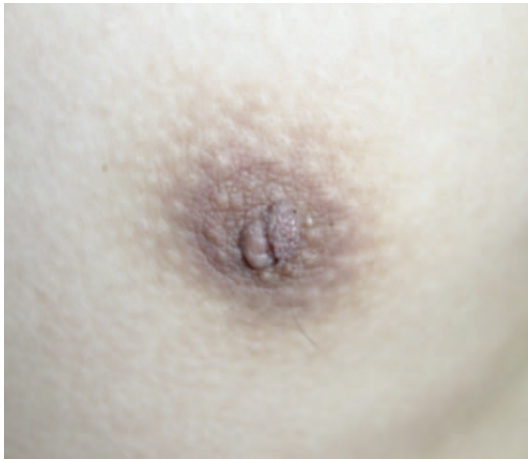


Figure 2. Condyloma acuminatum on the left nipple.

This patient and his wife have frequent marginal behavior, which refers to intimate contact other than sexual intercourse, such as oral-nipple and hand-nipple contact. These may have led

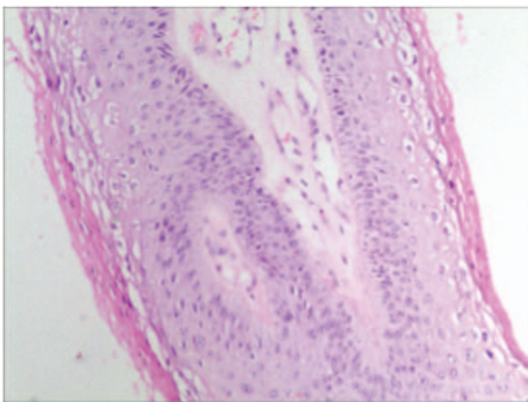


Figure 3. Histological examination of the coronary sulcus showed hyperkeratosis, parakeratosis, and papillomatosis. (Hematoxylin and eosin stain; original magnification $\times 200$).

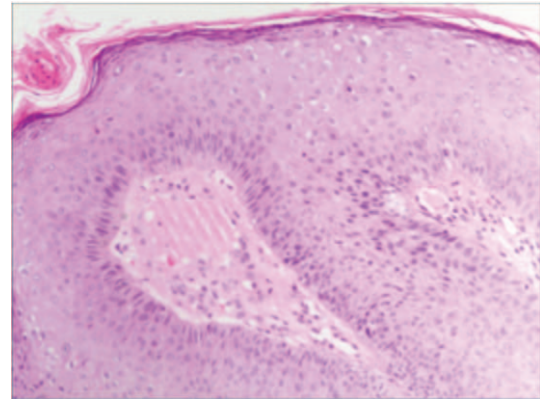


Figure 4. Histological examination of the left nipple showed hyperkeratosis, parakeratosis, and papillomatosis. (Hematoxylin and eosin stain; original magnification $\times 200$).

to CA occurring on the nipple. The patient ignored the disease because the lesion on the nipple was small and slow-growing, which increased the chance of infection spreading outside the genitals. Besides, biopsy specimens of the left nipple and HPV DNA made a definite diagnosis of CA. The patient was treated properly and there was no sign of recurrence until now.

We reported the case of CA on the nipple, which shows that in clinical work we should pay more attention to CA outside the genitals, avoiding delay and errors in the process of diagnosis and treatment.

Author contributions

Data curation: Yan Wu, Man Li, Wenhui Lun.

Formal analysis: Ge Song.

Methodology: Wenhui Lun.

Writing – original draft: Yan Wu, Ge Song, Man Li.

Writing – review & editing: Yan Wu, Wenhui Lun.

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