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Penile and scrotal condyloma acuminatum in a three-year-old boy:

A rare case report

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Abstract

Condyloma acuminatum is a common sexually transmitted diseases in adults, but its presence in children is rare and could be associated with sexual abuse. We are reporting this case because of the rarity of presence of warts on the penis and the scrotum of a child, which certainly could not have been used for sexual purposes. Surgical excision of warts was performed.

Keywords

Condyloma acuminatum; anogenital warts; child; sexually transmitted diseases.

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Introduction

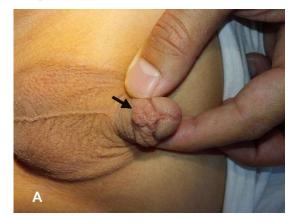
Condyloma acuminatum, also called as venereal warts, is one of the most common sexually transmitted diseases in adult age group [1-3]. There is ample evidence that the incidence of anogenital warts in pre-pubertal children is increasing [4]. In the pediatric patients, sexual transmission as well as nonsexual transmission such as autoinoculation, heteroinoculation through casual contact and fomite transmission, and vertical transmission during pregnancy and delivery have been reported [5,6]. Most of the warts in the pre-pubertal children occur either in the perianal area or the vulvar region, are more common in girls than in boys [7]. Penile wart was described in only a boy [7]. However, penile and scrotal warts have not yet been described in boys.

We are reporting this case because of the rarity of presence of warts on the penis and the scrotum of a boy child.

Case Reports

We present a 10 year old boy patient. He was brought to the outpatient department in

pediatric surgery clinic by her mother with a 7 month history of papillomatosis changes in the genital area. Local genital examination revealed two asymptomatic warty papule in pink colored, 7-10 mm in size, situated at the scrotum and the coronal sulcus [Fig 1. A,B].



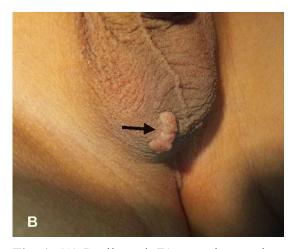


Fig. 1. (A) Penile and (B) scrotal worts in a 10 year old child.

No relevant medical history of the child was noted. There were no genital or extragenital warts either in the parents or any of the close family members seen presently or in the past. There was no regional lymphadenopathy. No other wart was seen on the body. Surgical excision of warts was performed successfully. Histology confirmed the diagnosis of condylomata acuminate [Fig 2. A,B]. Follow up four weeks after the excision biopsy did not show any recurrence.



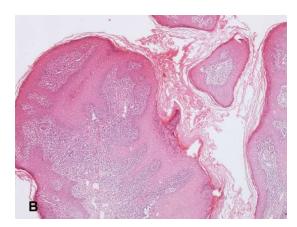


Fig. 2 (A) Papillomatosis, hyperkeratosis, parakeratosis, irregular acanthosis showing condyloma (H/E, x20). **(B)** Papillomatosis, hyperkeratosis, irregular acanthosis and chronic inflammatory mononuclear cell infiltration under epithelial showing condyloma (H/E, x100).

Discussion

Condvloma acuminatum. infection an caused by human papillomavirus (HPV), has become one of the most common sexually transmitted diseases [3]. Human papillomaviruses (HPVs) are DNA viruses that can induce hyperplastic, papillomatous, and verrucous squamous cell lesions in the skin and at various mucosal sites of the body [4]. In the last two decades, there are a higher incidence of anogenital warts cases diagnosed among adults and children [5,8,9]. The mucosotropic types of the HPV, especially HPV 6 and 11 mainly occurs in adults, and the infection caused by sexual transmission [8,10,11]. However, condyloma acuminatum in children was determined to be associated with both mucosotropic (HPV 6 and 11) and cutaneotropic types (HPV 2) of the virus [12].

In the adult population, the prevalence of condyloma acuminatum is approximately 0.6% to 13% [13], but molecular diagnostic studies have been suggested to be between 11% to 80% of HPV infection [14,15]. The prevalence of HPV infections in children, using different serological methods, antibodies against HPV 16 changes between 3.0% to 44.5% [16,17].

Condyloma acuminatum can show transmission in different ways, such as

vertical, innocent and sexual contact. Prospective studies showed that in half of the infants delivered vaginally were found HPV perinatal transmission of at oropharyngeal and genital sites [18,19]. The vulvar, vaginal, urethral, and perianal areas in girls can be affected by ano-genital warts. Boys typically have lesions in the peri-anal area. Penile warts are rare [20]. The view on examination of ano-genital warts can vary from subtle, skin-colored, flat warts to moist, pink to brown and cauliflower-like lesions [21].

Therapeutic approaches in children with ano-genital warts also are controversial. The location and extent of warts are important in choice of treatment. Treatment the modalities include alternatives such as burning, freezing, laser treatment, surgery, and chemical treatment [21]. The spontaneous remission rate of warts may be as high as 67% [22]. Additionally, 25% to 50% of the patients do not adequately respond to treatment [22].

The exact cause of contracting the infection is not known. Probably, it was a non-sexual mode, a close intimate contact in the past with a person having warts elsewhere. We are reporting this case because of the rarity of presence of warts on the penis and the scrotum of a child, which certainly could not have been used for sexual purposes. However, the question of sexual transmission will be raised when a child presents with anogenital warts [9]. Hence, ano-genital warts in childhood have serious medical, legal and social implications together with child protection.

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