Case Report

Seborrheic keratosis over genitalia masquerading as Buschke Lowenstein tumor

N. Sudhakar, S. Venkatesan, P. S. Mohanasundari, S. Thilagavathy, P. Elangovan
Department of STD, Government Stanley Medical College and Hospital, Chennai, Tamil Nadu, India

Address for correspondence:
Dr. P. Elangovan, Department of STD, Government Stanley Medical College and Hospital, Chennai, Tamil Nadu, India.
E-mail: elango7257@gmail.com

Abstract

Seborrheic keratosis (SK) is a common benign condition of the skin. It does not usually appear before middle age. Upper trunk and face are the sites most commonly involved. Lesions are also frequently seen on the extremities. SK of the genitalia is a rare entity. It has been frequently mistaken as genital warts and differentiation is made only on histopathology. We report a case of SK with polypoidal lesions restricted to the skin on and around the genitalia since 10 years. SK should be considered in the differential diagnosis of pedunculated lesions of the penis. The histopathology after shave excision is diagnostic.

Key words: Genitalia, genital warts, seborrheic keratosis

INTRODUCTION

Seborrheic keratosis (SK) is a common, benign epidermal proliferation, which can occur anywhere in the skin with the exception of palms, soles and mucosa. There is only one report of mucosal SK in the conjunctiva.

The genital organs of the human body are prone to a variety of infective diseases that include bacterial, viral, fungal and protozoal. The infective rates of these diseases widely vary between individuals depending on their sexual activity and immune status. The commonest viral disease that involves genital organs is condyloma acuminata caused by human papilloma virus (HPV). HPV involves the skin as well as mucosa of the genital organs. There are also other noninfectious lesions of the genital organs.

Access this article online

Quick Response Code:

Website: www.ijstd.org

DOI: 10.4103/0253-7184.156736

Seborrheic keratosis is one among the rare noninfectious benign disease of the genital organs. We are reporting a rare and unusual presentation of SK masquerading as giant condyloma acuminata (Buschke Lowenstein Tumor) over the skin on and around the genitalia that can cause a diagnostic dilemma to the clinician.

CASE REPORT

A 55-year-old male patient, farmer by occupation presented to our STD clinic with a large polypoidal growth on the penis, scrotum and right upper thigh since last 10 years. 10 years back he developed progressive itching on the tip of the penis and subsequently within a few days he developed small skin colored lesion with clear fluid oozing from them on scratching. Later the lesions progressively increased in size and circumferentially over the skin of prepuce. Similar polypoidal growth developed over the scrotum and right upper thigh that subsequently increased in size. All these lesions were progressively enlarging became hard, not associated with pain but with a mild itch. There was no history of similar lesions elsewhere in the body. Patient was also able to have sexual intercourse during the initial 2 years.

How to cite this article:
Sudhakar N, Venkatesan S, Mohanasundari PS, Thilagavathy S, Elangovan P. Seborrheic keratosis over genitalia masquerading as Buschke Lowenstein tumor. Indian J Sex Transm Dis 2015;36:77-9.

On examination of the patient [Figure 1], there was the polypoidal growth involving the skin over the prepuce, scrotum and right upper thigh. There was circumferential growth involving the skin of the prepuce, scrotal growth involving its tip and growth over right upper thigh measuring an average size of 3 cm × 2 cm. The perianal area, gluteal region and rest of the body surface were free of similar lesions. The patient was able to urinate without any difficulty. His sexual activity was compromised during the last 8 years. The wife did not complain of any such lesions on her sexual organs and was found normal on examination.

The initial diagnosis of giant condyloma acuminata, verrucous carcinoma over genitalia, giant acrochordons (skin tags) was kept in mind, and the patient was investigated. The complete hemogram, liver, and renal function tests and immune status were found to be normal. The patient was taken up for shave excision of the lesions under general anesthesia. The preputial skin with the lesion was excised along with shave excision of similar lesions over the scrotum and right upper thigh. Pap smear examination of the spouse found to be normal. The histopathological examination [Figures 2 and 3] showed

- Scrotal lesion: Section shows papillomatous lesion lined by hyperplastic squamous epithelium with hyperkeratosis and acanthosis. The dermis shows diffuse lymphohistiocytic infiltrate consistent with SK
- Thigh lesion: Section shows marked hyperkeratosis, acanthosis and papillomatosis. Keratin cysts [Figure 4], are present consistent with SK
- Penile lesion: Section shows papillomatosis with hyperkeratosis and acanthosis. A few horn cysts are present consistent with SK.

There is no evidence of malignancy in any of the three lesions.

DISCUSSION

Seborrheic keratosis occurs after the third decade and affects only the hair bearing skin, invariably sparing the

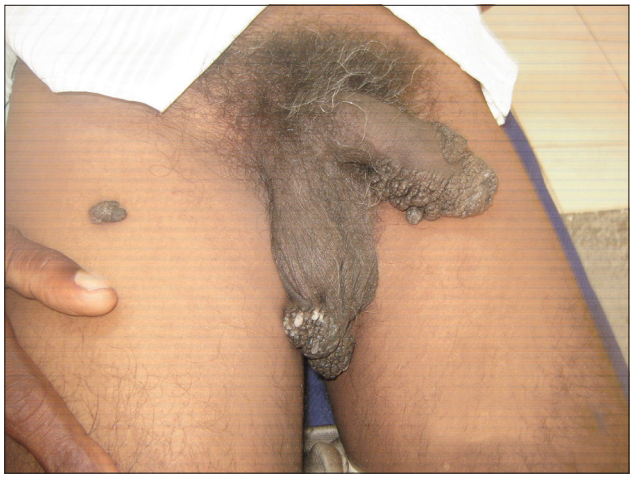

Figure 1: Seborrheic keratosis over penis, scrotum and right upper thigh

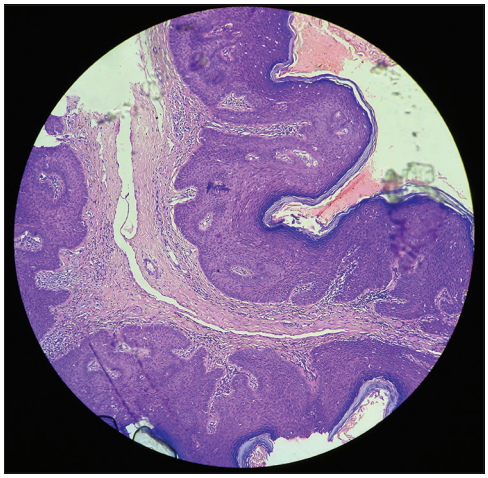

Figure 2: Histopathology (low power view)

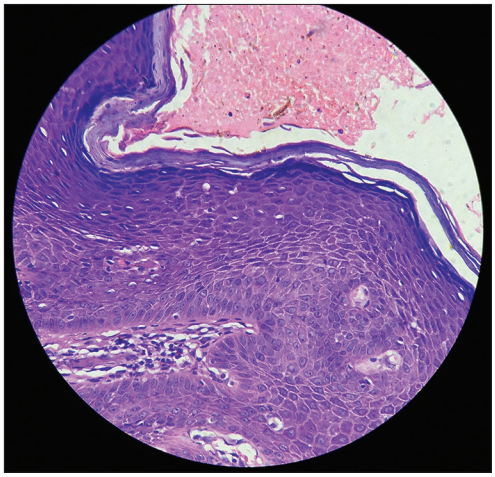

Figure 3: Histopathology (high power view)

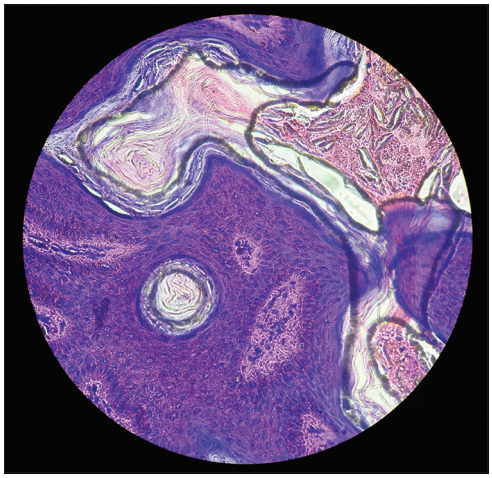

Figure 4: Histopathology (high power)-horn cyst

mucosal surfaces, the palms and soles. They vary in color from tan to black. They can manifest as macules, papules, plaques, or polypoidal lesions depending on the stage of development. They are more common in sun exposed areas. Stern *et al*., reviewed 527 lesions of seborrheic keratosis and found genital involvement in 2%, but the gender has not been specified in the study. Condyloma acuminata, basal cell carcinoma, melanoma are the most common misdiagnoses of SK.

Several morphologic forms of SK are described. These include flat SK, pedunculated skin tag such as SK, stucco keratosis, dermatosis papulosa nigra, melanoacanthoma, and inverted follicular keratosis. Polypoidal mass, as described in our case, has been reported in the genital region in several case reports. Livaoglu *et al*., and Thakur *et al*., reported large, polypoidal SK in the genitalia in a 42-year-old and 50-year-old male patient, respectively. Shenoy *et al*., reported a case of melanoacanthoma in the genital region. Roth *et al*., also reported a case of inverted follicular keratosis of the vulva.

The clinical diagnosis of SK may be difficult especially over the genitalia. Diagnosis becomes more difficult in the genital region as the features of distinct keratotic and follicular plugging, stuck-on appearance disappear because of the friction and maceration typical of this area.

Seborrheic keratosis may be grouped into different histological subtypes: Acanthotic, hyperkeratotic, adenoid, plane, clonal, bowenoid, inverted follicular keratosis, benign squamous keratosis and melanoacanthoma. Among these, the acanthotic subtype appears to be the most common. This type shows marked acanthosis with predominately basaloid cells, moderate papillomatosis and hyperkeratosis and characteristic presence of horn cyst or pseudocyst.

The treatment of SK consists of shave excision, curettage, cryotherapy by liquid nitrogen, trichloroacetic acid application, electrodessication and carbon dioxide laser ablation.

In our case report, SK had a longer duration of 10 years. The patient had no mucosal involvement. The spouse had no history of similar lesions.

Even though SK can occur on any body site, our patient seems to have an interesting presentation. Strict confinement of these lesions to the skin on and around the genitalia and sparing of classical site is unusual. A high index suspicion is essential for the correct diagnosis.

CONCLUSION

The skin over and around the genitalia is rarely affected by SK. This case report signifies a rare form of SK involving penis, scrotum, and adjacent thigh. This rare condition should be considered in the differential diagnosis for the lesions of the penis and histopathology after shave excision will help in the diagnosis.

FURTHER READING

1. MacKie RM. Epidermal skin tumours. In: Champion RH, Burton JL, Ebling FJ, editors. Textbook of Dermatology. London: Blackwell; 1992. p. 1459-504.
2. Herten RJ. Keratosis. In: Newcomer VD, Young EM Jr, editors. Geriatric Dermatology: Clinical Diagnosis and Practical Therapy. New York: Igaku-Shoin; 1989. p. 571-7.
3. Willoughby C, Soter NA. Stucco keratosis. Arch Dermatol 1972;105:859-61.
4. De Rosa G, Barra E, Gentile R, Boscaino A, Di Prisco B, Ayala F. Verruciform xanthoma of the vulva: Case report. Genitourin Med 1989;65:252-4.
5. Cheng SF. Seborrheic keratosis of penis. Urology 1974;3:595-7.
6. Friedman SJ, Fox BJ, Albert HL. Seborrheic keratoses of penis. Urology 1987;29:204-6.
7. Stern RS, Boudreaux C, Arndt KA. Diagnostic accuracy and appropriateness of care for seborrheic keratoses. A pilot study of an approach to quality assurance for cutaneous surgery. JAMA 1991;265:74-7.
8. Pierson D, Bandel C, Ehrig T. Benign epidermal tumours and proliferations. In: Bolognia JL, Jorizzo JL, Rapini RP., editors. Dermatology. Vol. II. New York: Mosby; 2003. p. 1697-701.
9. Rosai J. Skin: Tumours and tumour like conditions. In: Rosai and Ackerman's Surgical Pathology. 9th ed., Vol. I. St Louis, Missouri: Mosby; 2004. p. 130-245.
10. Zhao YK, Lin YX, Luo RY, Huang XY, Liu MZ, Xia M, *et al*. Human papillomavirus (HPV) infection in seborrheic keratosis. Am J Dermatopathol 1989;11:209-12.
11. Jacyk WK, Dreyer L, de Villiers EM. Seborrheic keratoses of black patients with epidermodysplasia verruciformis contain human papillomavirus DNA. Am J Dermatopathol 1993;15:1-6.
12. Li J, Ackerman AB. "Seborrheic keratoses" that contain human papillomavirus are condylomata acuminata. Am J Dermatopathol 1994;16:398-405.
13. Kettler AH, Goldberg LH. Seborrheic keratoses. Am Fam Physician 1986;34:147-52.
14. Leon P. Benign tumours of the skin. In: Mathes SJ, editor. Plastic Surgery. 2nd ed., Vol. V. Philadelphia: Elsevier; 2006. p. 251-72.

Source of Support: Nil. **Conflict of Interest:** None declared.