



CONDYLOMA ACUMINATA MASQUERADING IN GENITAL LICHEN SCLEROSUS : AN UNUSUAL COEXISTENCE

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ABSTRACT

BACKGROUND- Lichen Sclerosus is a chronic inflammatory dermatosis commonly affecting post menopausal women and presenting with pruritus and vulvar atrophy. Condyloma acuminata , caused by Human Papilloma Virus (HPV) , typically manifests as verrucous growths in the anogenital region. The coexistence of HPV- related Condyloma Acuminata within areas of Genital Lichen sclerosus is uncommon and may pose diagnostic difficulty as it may modify the clinical appearance of the lesions.

CASE PRESENTATION – A 56 year old post menopausal woman presented with a progressively enlarging verrucous growth over the vulva associated with pruritus. Examination revealed a solitary hyperkeratotic lesion measuring 7*5*3 cm with surrounding hypopigmented atrophic skin suggestive of lichen sclerosus. Histopathological examination showed papillomatosis , hyperkeratosis with numerous koilocytes consistent with condyloma acuminata, along with adjacent features of lichen sclerosus.

CONCLUSION – This case highlights an unusual coexistence of condyloma acuminata within genital lichen sclerosus. Careful clinical assessment and histopathological evaluation are essential for the accurate diagnosis and appropriate management in such overlapping presentations.

KEYWORDS- Condyloma Acuminata , Lichen sclerosus, HPV, Koilocytes.

INTRODUCTION AND IMPORTANCE

Verruca vulgaris or common wart is a viral skin infection caused by Human Papilloma Virus particularly of strains 6 and 11. Clinical manifestations of HPV occur on mucosal surface and skin throughout the body. (2)

The main route of transmission is by sexual intercourse however horizontal transmission, self inoculation and vertical transmission are also documented (1)

HPV skin infections are estimated to affect 10 % of global population across all age groups.(2)

HPV is a double stranded deoxyribonucleic acid virus with an icosahedral capsid that can infect epithelial cells of skin, oral cavity and anogenital region.

Anogenital wart like any other chronic STI have a significant impact on sexual and social lives leading to depression and impairment of sexual functioning. Risk factors include promiscuity, pregnancy, hormonal contraceptive use, immunosuppression, smoking, injecting drug and alcohol use, unsafe sexual behaviour and risky sexual partners.

There is a significant increase of anogenital warts in geriatric population with 22% of world's population more than 65 years.(3)

Anogenital warts are highly infectious , approximately 65% of individuals with an infected partner develop anogenital wart within 3 weeks to 8 months. Rarely anogenital wart can be associated with malignant lesions- Buschke Lowenstein tumour.(4)

Treatment options include home based chemical treatment – Podofilox, imiquimod.

Physician applied chemical treatment -podophyllin , Trichloroacetic Acid, interferons , Green tea extract.ablative treatment- cryotherapy, surgical removal, laser treatment .(4)

The main limitation of current therapies is high recurrence rate after initial remission.

Lichen sclerosus is a chronic, inflammatory mucocutaneous disorder of genital and extragenital skin.

According to our knowledge and literature search only a few cases of co existence of Lichen sclerosus and genital wart are reported. (5)

Lichen sclerosus and Atrophicus is associated with an increased risk of vulval cancer even though it is not a premalignant condition.(6)

It is 10 times more common in women than men and is known to affect females at any age with two peaks of incidence- pre pubertal girls and post menopausal women.

CASE PRESENTATION

A 56year old postmenopausal female patient presented to the Dermatology outpatient department with a solitary verrucous, hard, projection like lesion over the vulvar region of 6 months duration. The lesion initially appeared as a papule and progressively increased in size over time eventually attaining its present dimensions of 7*5*3 cm.

The patient reported associated pruritus and intermittent pain over the lesion. Notably, the pruritus preceded the development of the lesion. There was no history of discharge. There was no history of pain while urination, weight loss, or recent sexual exposure. There was no history of similar lesions. On detailed local examination,a solitary, well defined, hyperkeratotic, verrucous growth was noted over the vulvar region. The lesion was firm and non tender on palpation, with no active discharge or bleeding. Surrounding the introitus, an area of atrophy and hypopigmentation was noted around the introitus, which had not been previously recognized by the patient. On examination there was no lymphadenopathy found.

Routine laboratory investigations were within normal limits. On histopathological examination of the lesion revealed marked hyperkeratosis, papillomatosis and parakeratosis. Numerous koilocytes were identified within upper layers of epidermis. No evidence of invasive malignancy was observed.

Fig: Anterior view of Verrucous finger like projection (Condyloma acuminata) along with area of hypopigmentation and atrophy (Lichen Sclerosus) .



Fig: Lateral view of Verrucous finger like projection (Condyloma accuminata) in the Vulva



Fig: Specimen shows koilocytes typical of condyloma acuminata

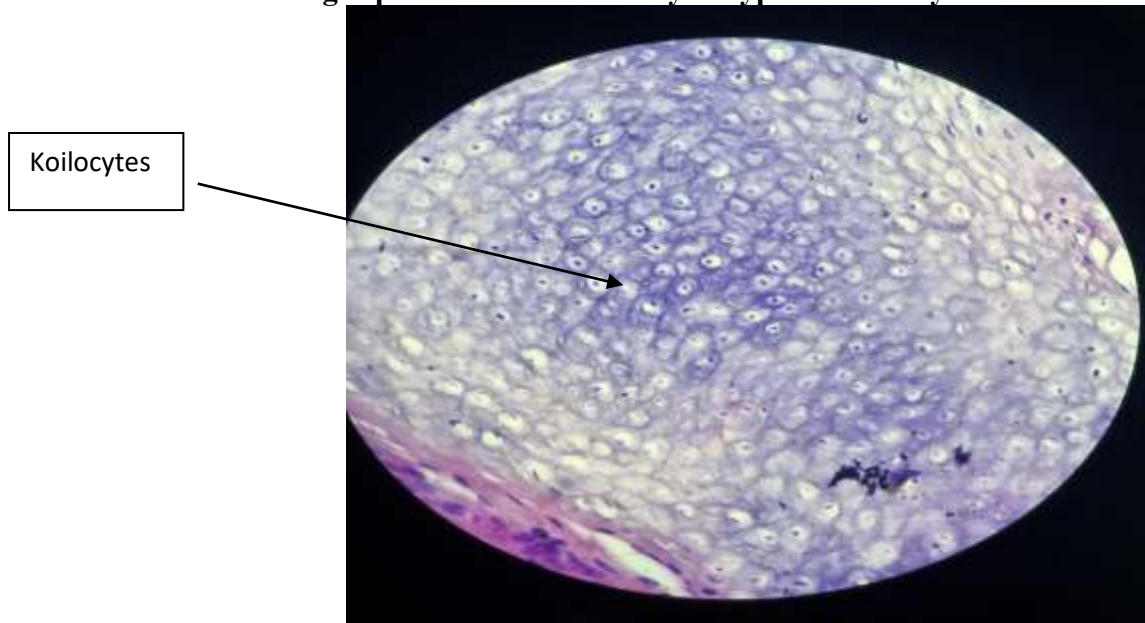
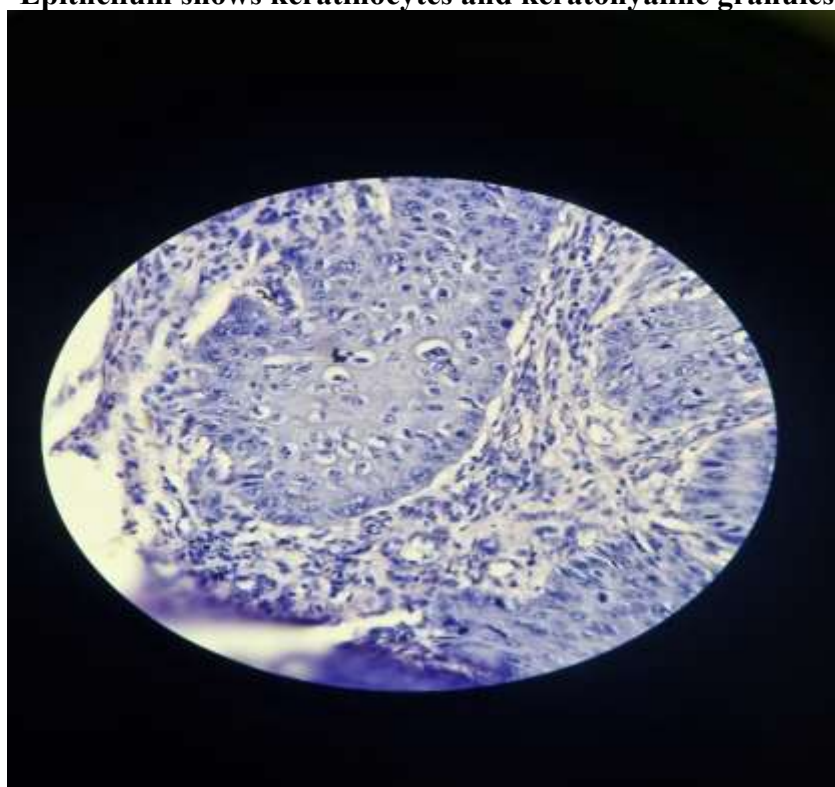


**Fig: Specimen shows severe hyperkeratosis along with papillomatosis and parakeratosis.
Epithelium shows keratinocytes and keratohyaline granules**



DISCUSSION

Condyloma Acuminata are Anogenital Warts caused by HPV. There are over 200 genotypes of HPV ,of which 30-40 specifically affect the genital tract (1)

HPV enters the skin through microtrauma and infects the basal epithelial layer. The transmission to non genital skin sites occurs through contaminated objects such as razors, towels etc. individuals with a history of atopy or friction induced microtrauma to the skin are more prone to infection. (2)

Relhan et al in a study in New Delhi showed an increase in number of STI cases among geriatric population with an incidence of anogenital wart of 2.3%. As the ageing process progresses, changes occur in immune system known as immunosenescence. Ageing affects acquired immune system function. There is a decrease in number of naïve T lymphocytes, B lymphocytes and accumulation of aged T lymphocytes. All these changes impact geriatric susceptibility to infectious diseases. (3) Lichen sclerosus is characterized histologically by epidermal atrophy, basal cell vacuolar degeneration, dermal hyalinization and lymphocytic infiltration (7). Chronic inflammation and epithelial barrier disruption may predispose the affected skin to secondary infections and neoplastic changes. (8)

The coexistence of Lichen Sclerosus and HPV infection although not well established but has been described in isolated reports. Importantly, LS associated vulvar squamous cell carcinoma is generally HPV independent (8). Therefore distinguishing benign HPV related lesions from LS associated malignancy is of utmost importance.

In our case, the presence of koilocytes without stromal invasion ruled out invasive squamous cell carcinoma. The background LS contributed to the clinical suspicion of malignancy due to architectural distortion and chronic pruritus.

Hence, clinicopathological correlation remains essential in managing atypical verrucous vulvar lesions.

MANAGEMENT

In view of the size of the lesion and the necessity to exclude invasive malignancy, wide local excision was advised as the treatment of choice to ensure complete removal and adequate histopathological assessment to rule out occult dysplasia or carcinoma.

The patient was counseled regarding the underlying genital lichen sclerosus and advised application of high potency topical corticosteroid therapy (clobetasol propionate 0.05%) to control inflammation and pruritus.

However, the patient did not return for further treatment or follow up despite counseling. Therefore, post treatment outcome and follow up evaluation could not be documented.

CONCLUSION

This case highlights the importance of careful evaluation of verrucous vulvar lesions occurring on a background of genital lichen sclerosus. Condyloma acuminata may clinically mimic malignant conditions when arising over chronically inflamed and atrophic vulvar skin particularly in postmenopausal women.

Accurate diagnosis through histopathological examination is essential to differentiate benign HPV related lesions from carcinoma. Regular clinical follow up remains important in patients with lichen sclerosus due to its chronic course and potential risk of malignant transformation.

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