

## MULTIPLE CUTANEOUS HORNS OVER LICHEN PLANUS ON PENIS

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In a circumcised, 62-year-old-male, multiple cutaneous horns developed over the lesions of lichen planus on the penis. Biopsy revealed precancerous changes.

**Key words :** Cutaneous horns, Lichen planus.

Cutaneous horn is a protruding, dense, white or yellowish and straight or curved structure produced due to unusual cohesiveness of keratinized material. Its size may vary from a few mm in circumference and length to a spectacular size of several cm. These are common on the glabrous skin but extremely rare over the penis.<sup>1</sup> Cutaneous horns may be produced over a variety of benign and malignant cutaneous lesions including warts, verrucous epidermal nevi, seborrheic keratoses or squamous cell carcinomas.<sup>2</sup> Carcinoma may sometimes be present at the base of the horn.

### Case Report

A 62-year-old male came with firm, slightly painful growths over the glans penis of 8 months duration. Two years back, he had sought advice for an annular, dark blue-black lesion on the glans penis, at the same place, which had shown the characteristic histopathological features of lichen planus. A 6-week course of oral griseofulvin had shown no improvement and since then the patient was applying topical corticosteroids, irregularly. During the past 8 months, the patient noticed that some parts of the lesion were increasing in size forming rough nodular masses. Examination revealed

a well-circumscribed, firm, raised, hyperkeratotic plaque with a violaceous border over the dorsal surface of glans penis encircling the urethral meatus. At 2, 4 and 11 O'clock positions near the coronal sulcus, the keratin was heaped up forming nodular masses one of which was as big as 2 cm in diameter (Fig. 1). Regional lymph nodes were not enlarged. There was no other associated cutaneous, mucosal, hair or nail abnormality.

The routine hematological, urine and stool examinations and skiagram of chest were normal. VDRL test was negative. The histopathological examination of the lesion revealed hyperkeratosis, parakeratosis, irregular acanthosis, papillomatosis and



**Fig. 1.** Multiple horns on penis.

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downward proliferation of epidermis into the dermis. Epidermal cells showed varying degrees of dysplasia in the form of individual cell keratinization and a few large cells with hyperchromatic nuclei. The border between the epidermis and dermis was clearly definable and a dense chronic inflammatory cell infiltrate composed predominantly of lymphocytes with a few plasma cells and histiocytes was present in the upper dermis.

### Comments

Penile horn was first reported by Jewett<sup>3</sup> in 1854 and since then many cases are on record having single or multiple lesions. These are uncommon over the penis<sup>1</sup> and mostly seen in patients with a redundant prepuce, many of whom have phimosis which allows accumulation of discharge and has been suggested to be an important inciting factor for the development of wart, carcinoma and cutaneous horns.<sup>4</sup> Interestingly, none of these factors were apparently operative in our patient.

Histopathologically, the cutaneous horn may sometimes show features of an underlying cancerous or precancerous change.<sup>5,6</sup> The

changes observed in our patient were consistent with a precancerous pathology over the lesions of lichen planus. It is highly unusual for carcinomatous changes to be observed even in the long-standing lesions of lichen planus. However, mucosal lichen planus over the course of many years has developed malignant changes on rare occasions.<sup>7,8</sup>

### References

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