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RESEARCH ARTICLE

CUTANEOUS LICHEN PLANUS - UNEXPECTED MALIGNANT DEGENERATION

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Abstract

Carcinoma occurring in the cutaneous lesions of Lichen Planus (LP) though rarely mentioned in literature does occur and should be kept in mind while treating such lesions. We report a 70-year-old women who developed an SCC (Squamous Cell Carcinoma) in a long-standing lesion of hypertrophic LP on the lower leg. This observation is being presented to indicate the possibility of malignant transformation of cutaneous lichen planus to carcinoma, and suggest more regular monitoring especially in the hypertrophic forms and the need to have an early diagnosis so that it can be treated in the initial stages.

Introduction:

Lichen planus is a benign inflammatory disorder of the skin characterized by an itchy, violaceous papules and plaques. A lattice-like network of white lines called Wickham striae overlies the lesions is the most common dermoscopic finding in lichen planus.

Though lichen planus is a common papulosquamous disorder affecting about 1-2% of the population [1], neoplastic transformation of cutaneous LP lesions occurs very rarely, in contrast with malignant transformation of oral lichen planus; the transformation should be borne in mind while treating nonhealing longstanding lesions of lichen planus.

Observation:

A 70-year-old women presented with an ulcerative growth on the middle of the left lower leg of 6 months' duration. The clinical diagnosis of metastatic squamous cell carcinoma was confirmed by histochemicalexaminations.The interrogation revealed a history of itchy lesions on both legs for the past 20 years but had not received any specific treatment. She had no history of intake of arsenicals, ionizing radiation, topical application of coal tar, or systemic administration of immunosuppressive drugs.

Upon examination, a large painful, exophytic, ulcerating, bleeding, firm tumor with a size of 11×8×3 cm was found invading her left leg (fig.1), and a multiple pigmented papules and nodules, some of which had depigmented summits, were present over both legs (fig.2)

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The left inguinal lymph node was enlarged to 5-6 cm in size, was mobile and tenderness was not detected (fig.3). A biopsy specimen was taken for histopathologyfrom a hypertrophic plaque lesion that had White crossing streaks (Wickham striae) aspect on dermoscopy (fig.4). The diagnosis of Lichen Planus was confirmed on histology.
The patient was referred to general surgery for excision of the carcinoma and further management.

Figures:

Fig 1:- Large, exophytic, ulcerating, bleeding, firm tumor invading the left leg.

Fig 2:- Vioalous papules and plaques, were present over both legs.

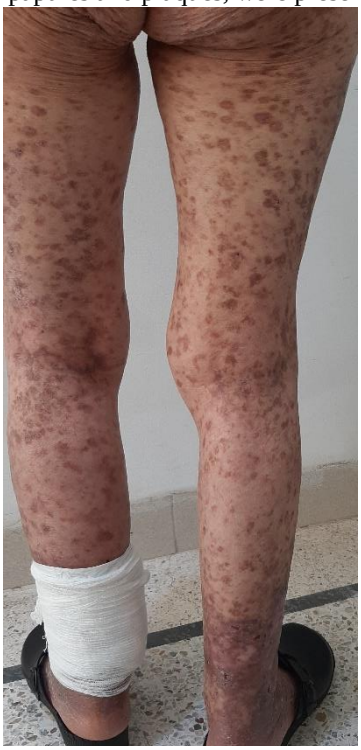


Fig 3:- The left inguinal lymph node enlarged to 5-6 cm in size, mobile without tenderness.

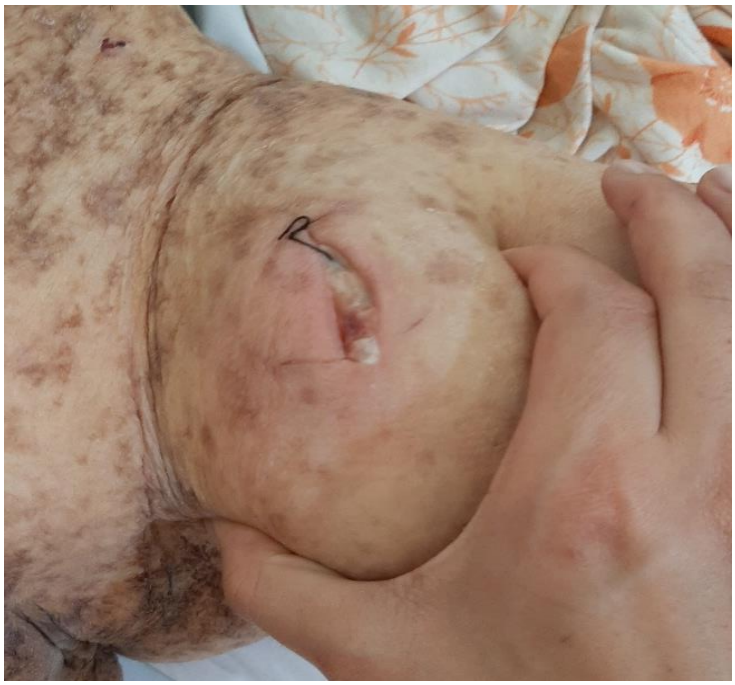
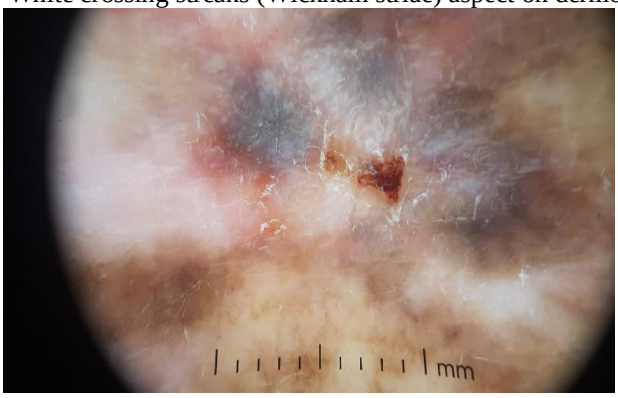


Fig.4:- White crossing streaks (Wickham striae) aspect on dermoscopy.



Discussion:

Studies suggest an estimated 0.3–3% risk of malignancy in patients with oral lichen planus,that is considered to be a pre-malignant lesion, however, cutaneous lichen planus does not carry an increased risk of malignant degeneration [2] .No significant association have been yet found between cutaneous lichen planus and squamous cell carcinoma [3].In the literature, 41 cases of lichen planus, mainly of hypertrophic or verrucous type, with consecutive carcinoma have been described [4]

The incidence of squamous cell carcinomas complicating cutaneous lichen planus is 0.4% and most of the reported cases are of hypertrophic type [5].Hypertrophic lichen planus is a subacute chronic variant of lichen planus characterized by hypertrophic or warty lesions most often found on the pretibial area of the lower limbs.

Most cutaneous squamous cell carcinomas are associated with risk factors like arsenic exposure, radiation exposure, chronic tar application, ultraviolet rays, burn scars, varicose ulcers, and human papilloma virus [6, 7]. Our patient

had not been exposed to any of the carcinogenic agents incriminated in the literature; the associated risk factors are chronic irritation in the form of itching and longstanding non-healing lesions of lichen planus.
There has been a speculation about chronic cutaneous inflammatory lesions triggering an oncogenic-like overdrive of growth factors which stimulate the epithelial cells constantly to undergo neoplastic transformation.

Conclusion:

This case is being reported to emphasize the infrequent possibility of development of malignancy in cutaneous lichen planus, that the real prevalence is not known over the long-term. Malignant change should be thought of when a proliferative area appears, particularly in long-standing, nonhealing itchy lesions of lichen planus. Patients with unusual clinical presentations during the course of follow up should be closely followed with periodic random biopsies to exclude malignant transformation.

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