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Clinico-histopathological correlation for diagnosis of lichenoid interface dermatoses

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Abstract

Context: Lichenoid interface dermatitis refers to the histological pattern which is useful for the classification and diagnosis of disorders of a particular group in dermatology with peculiar features.

Aims: To get clinico pathological correlation in lichenoid interface dermatitis which will help in accurate diagnosis by analyzing history, clinical examination as well as histological details of nature and extent of epidermal, interface and dermal changes and the distribution of various inflammatory cell infiltrates.

Methods: After appropriate case selection according to the inclusion criteria, the biopsy was taken and sent for histopathological analysis. It was reviewed and correlation was done in each patient.

Statistical analysis used: kappa correlation analysis.

Results: Out of total 117 cases, 108 were of lichen planus, five were of lichen striatus, two of lichenoid drug eruptions and two of lichen nitidus. Clinico-pathological correlation was present in 70.94% of cases of lichenoid interface dermatitis. Correlation was seen in 100% cases of lichen striatus, and 78% cases of lichen planus.

Conclusions: The most consistent findings in histology in our study were basement membrane degeneration, band like lymphocytic infiltrates and melanin incontinence. Other findings such as hypergranulosis, civatte bodies were not observed frequently.

Keywords: Lichen; Lichenoid; Interface dermatitis; Band like lymphocytic infiltrates

1. Introduction

The term "lichenoid" refers to papular lesions of which lichen planus is a prototype (Hegde and Khadilkar, 2014). Lichen is derived from Greek noun "lichen" meaning tree moss (Khopkar and Valia, 2013). The term "interface dermatitis" refers to the findings in skin biopsy of inflammatory infiltrate that obscures the dermo-epidermal junction. Interface functions as single anatomico-physiological unit and pathological alterations in any of the component of interface result in changes that can affect all its components (Joshi, 2013). There are various disorders with interface changes like early cutaneous T cell lymphoma (mycosis fungoides), vacuolar interface dermatoses etc. (Brehmer-Anderson, 2006) which need to be differentiated from lichenoid interface dermatoses in which histopathology is a valuable asset.

2. Subjects and methods

Patients were selected with the disorders of lichenoid interface dermatitis having superficial as well as superficial

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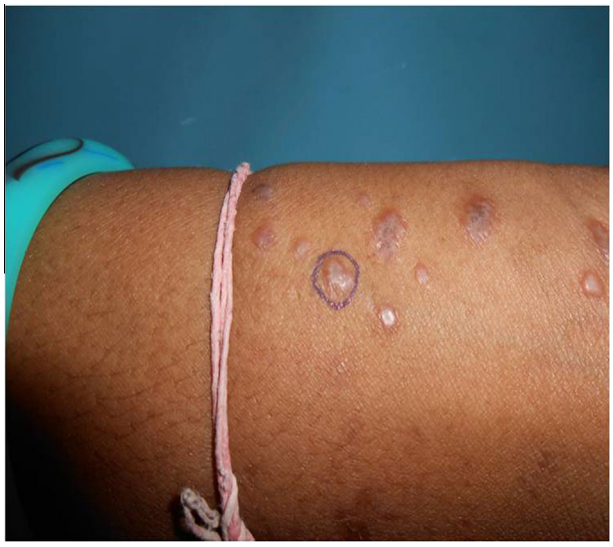

Figure 1. Classical lichen planus.

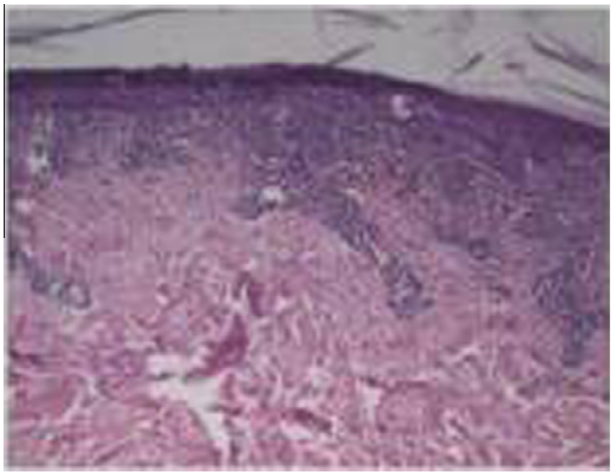

Figure 2. Histology of classical lichen planus.

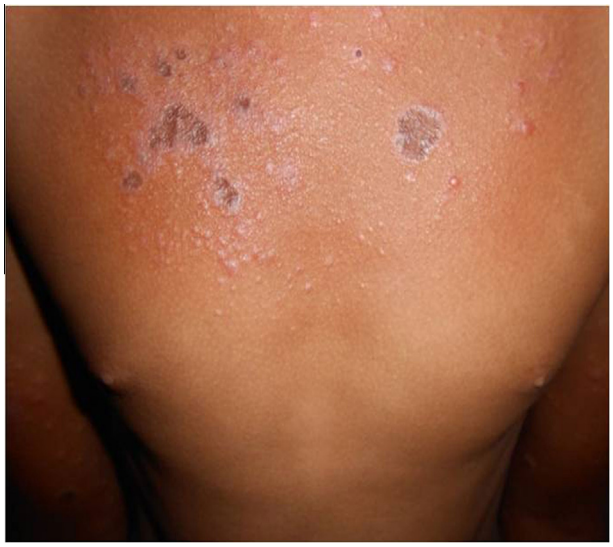

Figure 3. Actinic atrophic lichen planus.

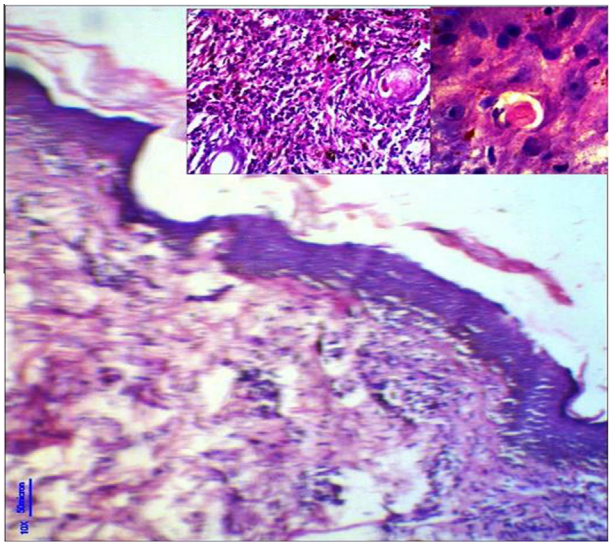

Figure 4. Histology of actinic atrophic lichen planus – civatte bodies.

and deep infiltrates (Barnhill, 1998). The disorders we included were lichen planus, lichenoid drug eruption, lichen nitidus with superficial inflammatory infiltrates and lichen striatus in the category having superficial as well as deep infiltrates. As we have focused our study on lichenoid interface dermatitis we have excluded cases having vacuolar interface dermatitis like erythema multiforme, systemic lupus erythematosus, fixed drug eruptions, graft vs. host disease etc. (Figs. 1–19).

Study was done from Oct 2012 to June 2014 on 117 cases with the clinical diagnosis of lichen planus and lichenoid dermatoses. Cases were evaluated histopathologically in dermatology department, Govt. medical college and Sir T hospital, Bhavnagar, after proper consent and filling proformas. The institutional ethical clearance was taken. After patient selection the most representative lesion was

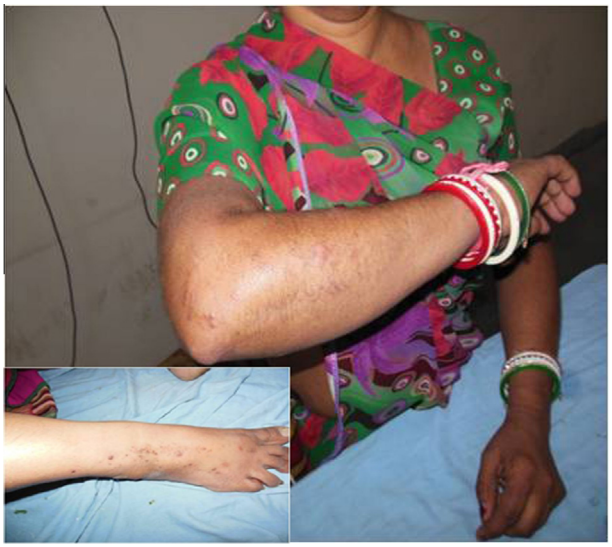

Figure 5. Blaschkoid lichen planus.