INTERNATIONAL JOURNAL OF MEDICAL AND APPLIED SCIENCES
E-ISSN:2320-3137

Case Report

POLYMORPHOUS LIGHT ERUPTION DERMATOSIS ON FACE IN A 14 YR OLD BOY

M.Mustafa Khan, Atiya Begum, Zakia Abid

Deccan College of Medical Sciences Owaisi Hospital, Hyderabad, India.

CORRESPONDING AUTHOR: Dr M.Mustafa Khan

Abstract :

Polymorphous Light Eruption (PLE) inflammatory dermatosis occurs at sites of sun exposure and is usually mediated by local or systemic immunologic factors in children. The study is aimed to precisely typify & meticulously evaluate the biopsy by histopathological examination. A 14 yr old boy presented with pruritic, oozing plaques, containing small and large blisters with yellow crusting and scaling localized over the facial area. Biopsy revealed presence of focally keratotic, parakeratotic, acanthotic epidermis with regional spongiosis and lymphocytic exocytosis. Basal layer showed interphase change with hydropic degeneration. Polymorphous light eruption is an inflammatory dermatosis that can occur in paediatric age and can be acute or chronic in nature.

Keywords : PLE, boy, basal layer degeneration.

INTRODUCTION

Polymorphous Light Eruption is an inflammatory dermatosis, occurring at sites of sun exposure & usually mediated by local or systemic immunologic factors in adults. Acute lesions last from days to weeks and are characterized by inflammation, often marked by mononuclear cells (not neutrophils), edema, and epidermal, vascular, or subcutaneous injury. Chronic lesions, on the other hand, persist for months to years and often show significant components of altered epidermal atrophy or hyperplasia or dermal fibrosis. Other inflammatory dermatoses occurring due to atopy, drug-intake, insect bite or irritant contact show widespread spongiosis. Hence, a precise typification is obligatory for specific diagnosis of the disease.

AIM

To meticulously evaluate the biopsy by histopathological examination.

MATERIAL & METHOD

A 14 yr old boy presented with pruritic, oozing plaques, containing small and large blisters with yellow crusting and scaling localized over the facial area for more than 6 months duration. No history of any drug-intake, insect bite or irritant contact was given. Punch biopsy was taken from the representative lesion. The biopsy received was fixed in 10% formalin, processed through graded alcohols, cleared in xylene and embedded in paraffin

wax. Later, thin sections were cut by rotary microtome, stained with hematoxylin and eosin and examined under progressive powers of light microscope.

RESULT

The microscopic examination revealed presence of focally keratotic, parakeratotic, acanthotic epidermis with regional spongiosis and lymphocytic exocytosis.Basal layer showed interphase change with hydropic degeneration. Reticular and deeper dermis revealed perivascular and peri-adnexal dense lymphohistiocytic infiltration diminishing gradually with depth.

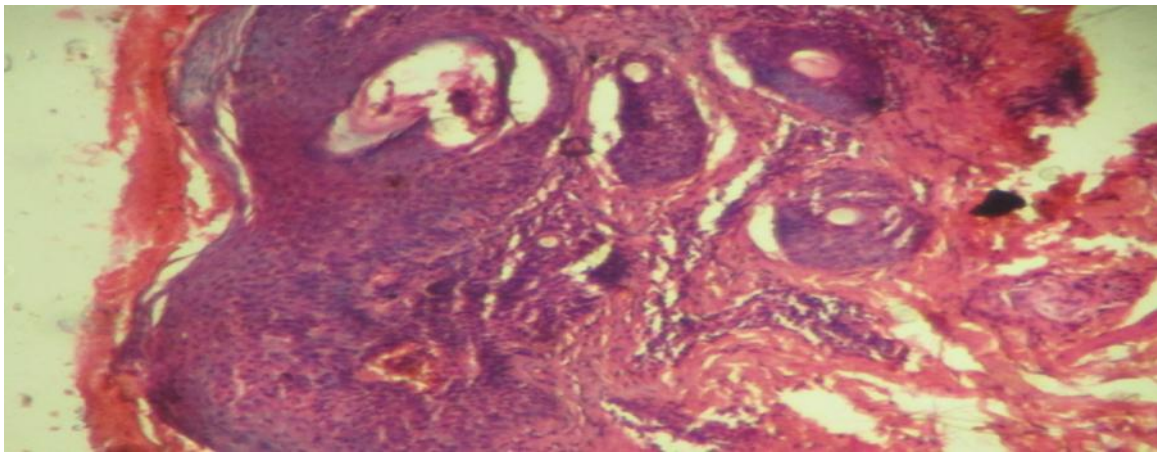

Figure 1: 40x.Hyperkeratotic epidermis with basal layer degeneration. Dermal inflammatory infiltrate diminishing gradually with depth.

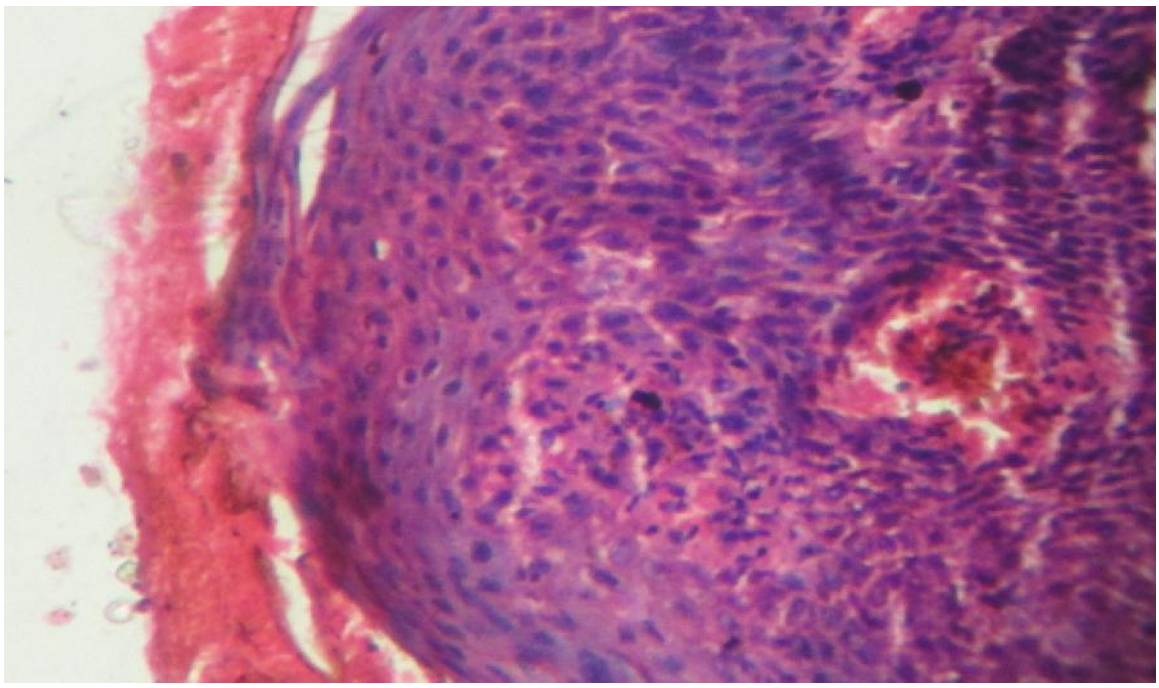

Figure 2: 100x. Hyperkeratosis, parakeratosis, acanthosis and basal layer hydropic degeneration of epidermis.

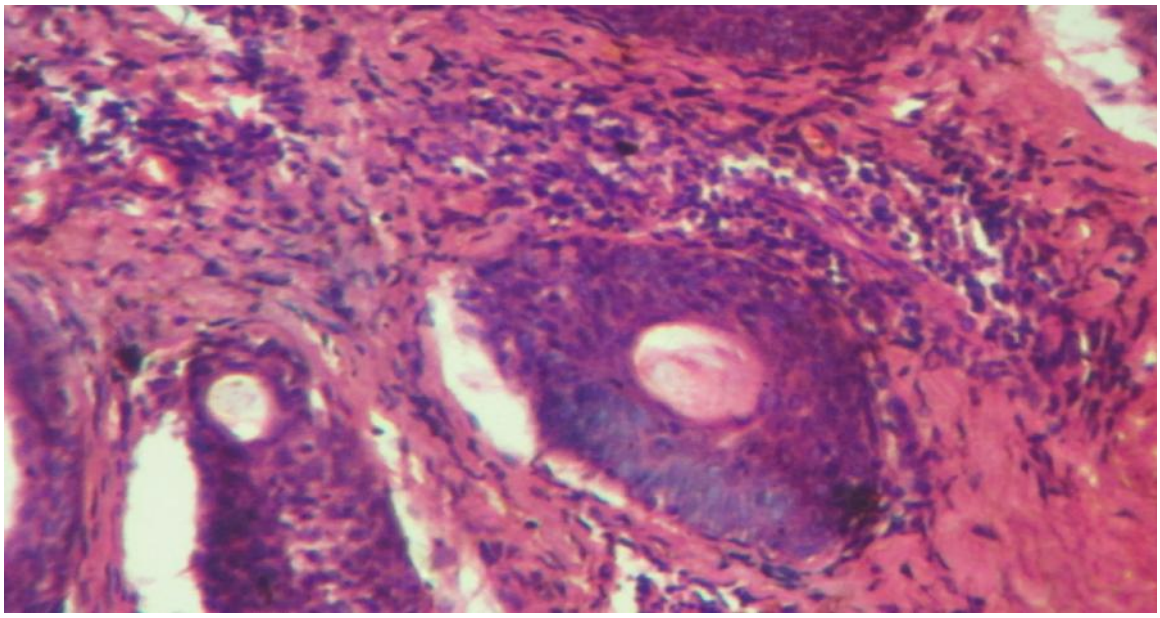

Figure 3: 100x. Peri-vascular and peri-adnexal dense lymphohistiocytic infiltrate.

CONCLUSION

Polymorphous light eruption is an inflammatory dermatosis that can occur in paediatric age and can be acute or chronic in nature. It is usually confused with other inflammatory dermatoses. A keen evaluation of patient history and thorough microscopic examination of epidermal and dermal components will lead to specific diagnosis. Hence, a meticulous histopathological evaluation is utmost valuable in prognosticating the course of disease and comprehensive management of the patient.

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