Original Research Paper

Volume - 12 | Issue - 11 | November - 2022 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Dermatology

A CASE STUDY OF RUPOID PSORIASIS IN YOUNG CHILD - A CUTANEOUS CLUE TO HIV

Dr. Brinda G Postgraduate, Department Of D.v.l. Government Medical College, Kadapa.

ABSTRACT Rupioid psoriasis is a type of plaque psoriasis in which the plaques form cones that resemble limpet shells. Some people refer to this condition as "coral reef" psoriasis due to the cone-like appearance of the plaques.A Case report of a 7yr old male child who presented with limpet like crusts atypical form rupoid psoriasis confirmed by biopsy as cutaneous clue for HIV

KEYWORDS : Rupoid psoriasis, atypical manifestation, HIV cutaneous marker,limpet crusts,immune dysfunction

INTRODUCTION

HIV infection results in atypical cutaneous diseases , maybe degree of indicative of immune dysfunction.Psoriais can be presenting feature of HIV infection and provide clue to patients immune system.Severe immunesuppresssion can be a significant risk factor for atypical forms of psoriasis like rupoid psoriasis,elephentine psoriasis

CASE REPORT: A 7-year-old boy presented to The Department of DVL., Government Medical College, Kadapa with 3 months history of multiple mild pruritic skin lesions started over buttocks, extremities ,face and trunk .On detailed history his grand mother informed both the parents were RVD positive and died , child was not followed up and has past history of recurrent oral candidiasis .

General examination revealed patient is conscious, coherent with built- wasting present with BMI - 15.4 and Systemic examination was normal

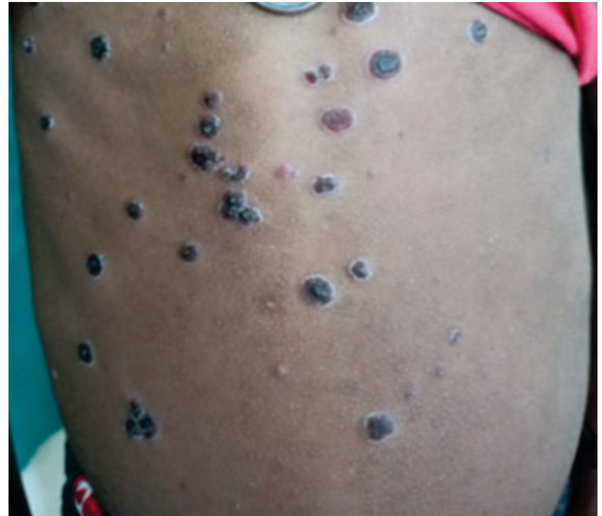
Cutaneous examination revealed well demarcated,hyperkeratotic brownish plaques with limpet like crusts predominantely over buttocks, hands followed by face and trunk with nail dystrophy ,subungual hyperkeratosis with no scalp involvement.Oral mocosa showed thick white membranous patch over tongue and buccal mucosa .

Our differential diagnosis included rupoid psoriasis, secondary syphilis, histoplasmosis,reactive arthritis, scabies , all of which have been associated with similar lesions. Laboratory data revealed that CD4+T-lymphocyte cellcount (450cells/mm3) was low. His HIV RNA viral load was 16,962 copies/mL, confirming a diagnosis of HIV infection , VDRL -ve and skin biopsy was negitive for scabies and confirmed psoriasis.

A skin biopsy performed on the plaque on the trunk revealed hyperkeratosis, parakeratosis, moderate acanthosis and loss of the granular layer . The upper dermis also showed edema and lymphocyte infiltration. the pathological hallmarks of psoriasis - few neutrophilic munro's micro abscesses were observed in our patient with PASI Score -48.75 . Oral scrapings showed fungal pseudohyphae suggesting oral candidiasis.

The rupioid scales and crusts resolved with the p.o. administration of retinoic acid and the topical application of steroids and vitamin D3.Topical therapy with triamcinolone acetonide 0.1% ointment, applied twice daily under occlusion using wet wraps. After 5 days of wet wrap therapy, significant improvement of the skin with desquamation of the adherent plaques on all sites of the body were noted. He then started antiretroviral therapy (ART) combined with psoriasis treatment.Three months after starting ART, his PASI score - 4.65

Before treatment:



After wet wraps:

DISCUSSION

Rupioid describes the color of the plaques, which are darker than the plaques in other types of psoriasis. It comes from rhupos, the Greek word meaning dirt or filth , is used to describe lesions that resemble syphilitic rupia. Atypical forms and severe forms of psoriasis can be the first presentation of HIV infection .Sebopsoriasis,rupoid psoriasis,erythrodermic psoriasis are common and tends to be prevalent in later stages of HIV - related immune dysfunction.Psoriasis tends to improve with reduced viral load and treatment with Highly Active Anti Retroviral Therapy

The causes of rupioid psoriasis are still unclear. However, the condition occurs as a result of the immune system malfunctioning triggering the immune system to speed up skin cell production, and the extra skin cells rise to the surface, where they form plaques.

The plaques associated with rupioid psoriasis are distinguished from those of other uncommon psoriasis variants based on shape, thickness, and color.In contrast to rupioid forms, regular plaque-type psoriasis

has a white, nonadherent and thin, scaly surface. Severe psoriatic flares and atypical forms of the disease (including rupioid plaques) have been reported in HIV-positive patients. Rupioid psoriatic flares have also been associated with drug treatments, such as oral or intravenous corticosteroids, nonsteroidal anti-inflammatory drugs, lithium carbonate, β-blockers or hydroxychloroquine

The clinical features of psoriasis with HIV infection are reported to be lamellar ichthyosis or erythroderma or rupioid hyperkeratotic pigmented plaques, and overlap between seborrheic dermatitis and psoriasis. The pathological features are reported as less frequent appearance of Munro'smicroabscesses, more irregular acanthosis and less marked thinning of the suprabasal layer compared with psoriasis with-out HIV infection.Many patients improved by ART. The mechanism is unknown, but it probably acts by reducing keratinocyte proliferation due to interference with DNA synthesis.This case tended to improve with administration of oral retinoic acid before the initiation of ARt therapy

Reactive arthritis may have a similar appearance to rupioid psoriasis but may be distinguished by a geographic relief map configuration with coalescing, keratotic and desquamating lesions, as well as associated urethritis, arthritis, and conjunctivitis.A rupioid eruption was reported as a manifestation of disseminated histoplasmosis with dirty-appearing, heaped-up, crusted lesions present on the cheeks, nose, and forehead on clinical examination and several intracellular and extracellular oval structures on histologic examination with periodic acid–Schiff and Gomori methenamine-silver stain. Malignant or rupioid syphilis refers to the stage in which papulopustules of pustular syphilis undergo central necrosis due to endarteritis obliterans and intravascular thrombosis

Patients with rupioid forms of psoriasis should have a careful drug history taken, along with HIV and syphilis testing. The relative benefits of intensifying psoriasis treatment (e.g., methotrexate, cyclosporine A, phototherapy, anti–tumour necrosis factor-α, interleukin [IL]-23 or IL-17 monoclonal antibodies) along with ART , ideally with the help of a multidisciplinary team.

Conflict of interest: Nil.

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