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A Case of Native Medicine Induced Hypomyopathic Dermatomyositis

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Abstract
Dermatomyositis (DM) is a type of inflammatory myopathy, idiopathic in origin, commonly presenting with progressive and symmetrical proximal muscle weakness with characteristic cutaneous manifestations. Skin features may develop even in the absence of outright myopathy that can persist even after successful treatment [1]. Here we present a case of 38-year-old female who presented with photosensitive erythematous papules over the face, trunk and upper limbs after intake of native medicine for her varicose veins.

1. Introduction

Dermatomyositis (DM), is an inflammatory myopathy associated with skin findings. Prevalence is 1 in 100,000 with predilection towards women than men. Diagnosis is based on skin rashes, progressive proximal myopathy, elevated muscle enzymes, abnormal electromyogram, and characteristic findings on muscle biopsy [2]. Typical cutaneous features include erythema over the face, neck, and upper trunk as (neck-line V-shaped). Muscle symptoms include mild to severe weakness, muscle cramps, and fatigue.

2. Case Presentation

A 38-year-old female, housewife by occupation came with complaints of erythematous papules over the face, neck, trunk and bilateral upper limbs for the past three months. History of pruritis and photosensitivity present. History of pain over bilateral shoulder joints present. There was no history of weakness of limbs, fever, headache and weight loss. History of native medicine intake for the same one year back for type 2 diabetes mellitus.

On examination, vitals were stable and systemic examination revealed no significant abnormalities. Painful limitation of movements was present in left shoulder joint predominantly for internal rotation, external rotation and extension. Lab investigations showed normal complete blood count, elevated ESR and CRP, mild rise in LDH and normal CPK levels. LFT, RFT and serum electrolytes were within normal limits. ANA was negative and complements C3 and C4 was normal. MRI bilateral thighs revealed features of inflammatory myositis. Skin biopsy was done from the erythematous patch which

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confirmed the diagnosis of dermatomyositis without muscle involvement.

TABLE - 1	
PARAMETER	RESULT
ESR	63 mm in 1 hour
CRP	1.8 mg/dL
WBC	10,920 cells/cu.mm
Hb	11.5 g/dL
Urea	22 mg/dL
Creatinine	0.6 mg/dL
LDH	237 IU/L
CPK (total)	115 U/L
Random glucose	157 mg/dL
ANA (IIF method)	Negative
Complement C3	137 mg/dL
Complement C4	31 mg/dL

TABLE – 1 Showing Summary Of Lab Investigations

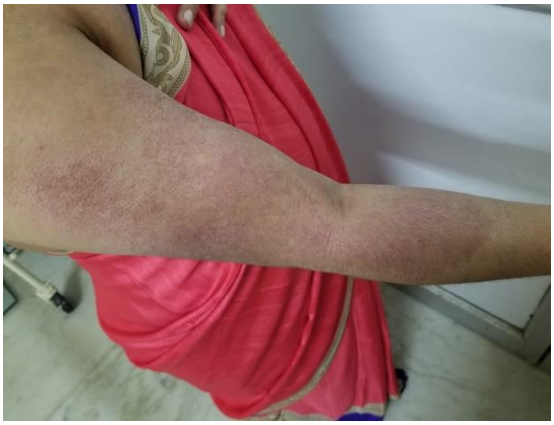

Image – 1 Showing Violaceous Erythematous Papules Over the Right

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ARM AND FOREARM

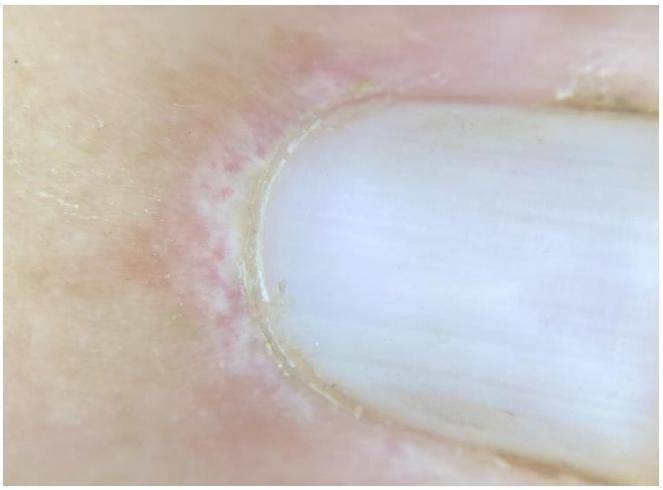

Image 2 Showing Bushy Hemorrhages Over the Nail Bed

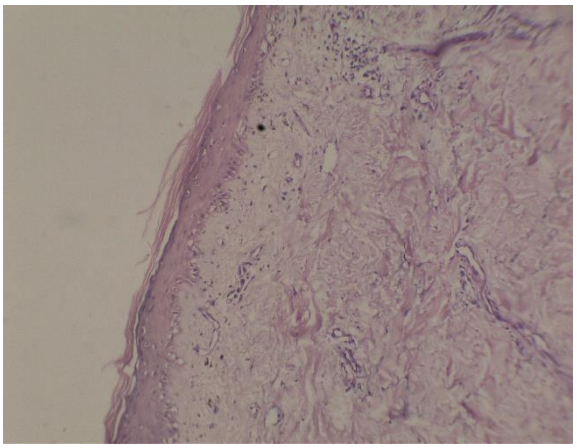

Image 3 Showing Thinned Out Epidermis with Basal Vacuolar Degeneration & Attenuated Rete Ridges

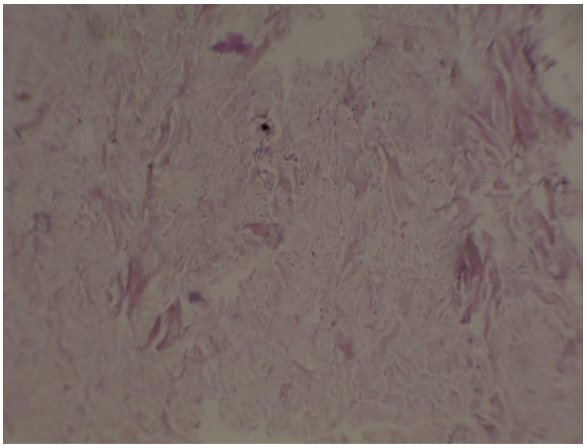

Image 4 Showing Basal Cell Vacuolation with Pigment Incontinence

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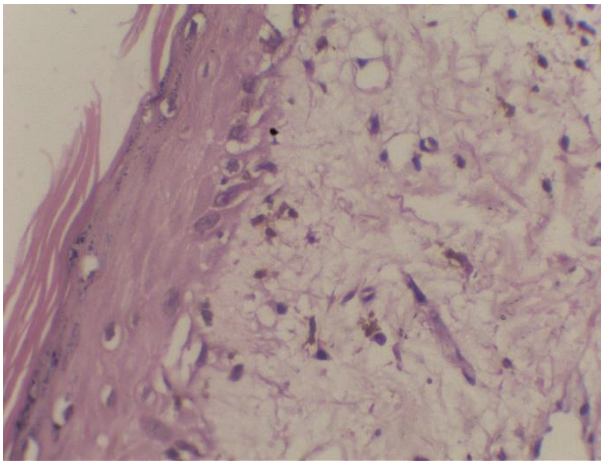

Image 5 Showing Perivascular Inflammatory Infiltrate

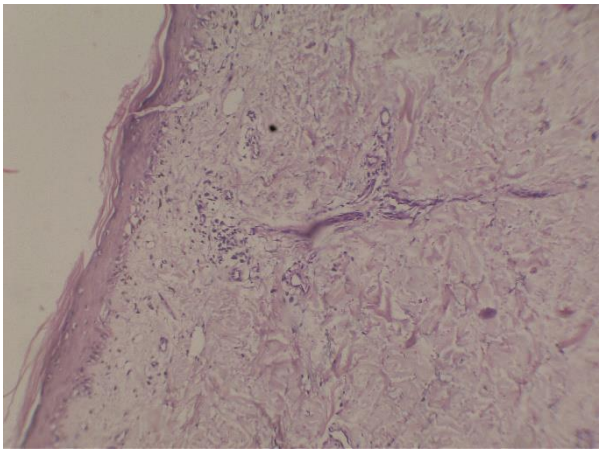

Image 6 Showing Muscle Bundle Surrounded By Collagenisation

Patient was started on Tab. Methylprednisolone 50 mg OD, Tab. Hydroxy-chloroquine 200mg HS, Sunscreen cream of SPF 50, Tab. Methotrexate 10 mg/week and Tab. Folic acid 5 mg twice a week. Patient symptoms and skin manifestations improved within one week of initiation of drugs [3].

3. Discussion

Most patients with DM present with simultaneous cutaneous and muscle involvement, evidenced by proximal muscle weakness and diagnostic testing that reveals the presence of myositis [4]. However, the onset of cutaneous disease can precede the appearance of myositis by up to several months in 30 percent of patients with classic DM and follows shortly after muscle involvement in 10 percent. The term "pre-myopathic dermatomyositis" is used to describe patients who have no clinical evidence for muscle disease but have had cutaneous manifestations of DM for less than six months [5].

Amyopathic dermatomyositis is considered a distinct form of DM, rather than classic DM in which the onset of muscle involvement is delayed for a prolonged period. Amyopathic DM is diagnosed in patients who lack muscle weakness and have no laboratory or radiologic signs of myositis despite the presence of cutaneous findings consistent with DM for at least six months [6].

Similar to amyopathic DM, hypo-myopathic DM presents with cutaneous findings consistent with DM and the absence of clinically appreciable muscle weakness for at least six months after the appearance of skin lesions. In contrast to amyopathic disease, subclinical evidence for myositis is evident through serologic testing for muscle enzymes,

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electromyography, muscle biopsy, or magnetic resonance imaging [7].

Non-steroidal anti-inflammatory drugs (NSAIDs), statins, antibiotics, chemotherapeutic agents, vaccines, radiotherapy, and other nonrelated drugs are usually implicated in causation of Dermatomyositis [8]. Native medicine is a rather uncommon cause in causation of dermatomyositis.

A diagnosis of cutaneous dermatomyositis (DM) is suggested by the constellation of characteristic cutaneous findings, muscle weakness, and laboratory evidence of myositis. However, in patients who present with ambiguous cutaneous findings or cutaneous findings that are suggestive of DM in the absence of clinical signs of muscle disease, a skin biopsy should be performed [9].

The histopathologic findings in DM are variable but typically include an interface dermatitis characterized by vacuolization of basal keratinocytes, a lymphocytic infiltrate in the superficial dermis, and dermal mucin. The biopsy is useful for ruling out other disorders that may resemble DM, including seborrheic dermatitis, contact dermatitis, atopic dermatitis, polymorphous light eruption, and papulo-squamous disorders. Malignancy should be ruled out especially in amyopathic dermatomyositis.

Treatment includes photo-protective agents, antipruritic agents manage, topical corticosteroids or topical calcineurin inhibitors for local treatment of skin manifestations and biologicals in extreme cases to attain prolonged remission [10].

4. Conclusion

Dermatomyositis although classically presenting with skin manifestations and myopathy, can also have other atypical features. Prompt diagnosis with careful clinical and laboratory evaluation can help in early detection of the condition and commencing timely treatment. Native medicine previously documented to cause flare of psoriasis and other rheumatological condition is found to be the causal factor of dermatomyositis in our case.

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