

Skin Manifestation and Pathological Changes in Dermatomyositis

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Figure 1. (A) Edema and violaceous scaly papules and patches over edematous upper eyelids, (B) periungual telangiectasia over fingers and (C) erythematous rash over the cheek, neck and ear lobe.

A 53-year-old female had the chief complaint of progressive weakness over four limbs in the past 1 year. The weakness was more severe in the proximal parts than in the distal parts of extremities. The patient progressively had difficulty in raising objects above the shoulder and in stepping down stairs. Even though myopathy was suspected, repeated creatine kinase (CK) measurements were within normal limit.

Physical examination revealed violaceous scaly papules and patches over edematous upper eyelids (heliotrope) and face. There was periungual telangiectasia over fingers (Fig. 1). There was no joint contracture or Gottron's sign. Cranial nerves were intact. Muscle

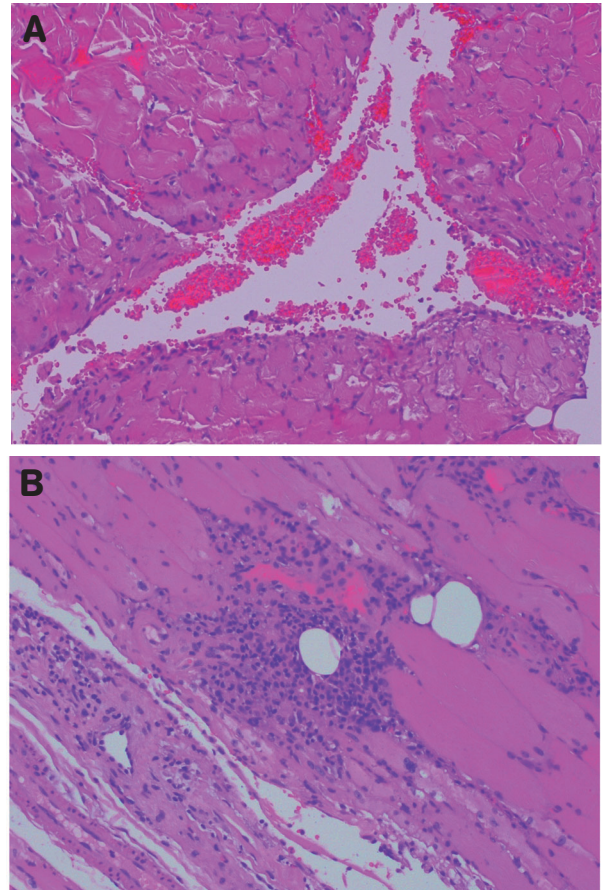


Figure 2. Muscle biopsy of the right vastus lateralis (H&E stain, $\times 100$), showing (A) perifascicular atrophy and (B) mononuclear cell infiltration in endomysium, perimysium and perivascular areas.

power was symmetrically 5- in the distal parts and 4 in the proximal parts of extremities (by MRC Scale). Deep tendon reflexes and sensation were normal.

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Results of nerve conduction velocities were normal. Needle electromyography revealed that amplitudes of motor unit potentials were decreased and there were spontaneous discharges in many tested muscles. Muscle biopsy of the right vastus lateralis showed perifascicular atrophy and mononuclear cell infiltration in endomysium, perimysium and perivascular areas (Fig. 2).⁽¹⁾

Extensive survey of malignancy was performed and results were negative. Muscle power improved to 5 in the distal parts and 5- in the proximal parts after steroid therapy for 6 months.

This report is aimed to illustrate that CK level can be normal in a patient with characteristic physical and pathological findings compatible with dermatomyosi-

tis⁽²⁾. The percentage of normal CK level is even higher in the elderly than in young patients⁽³⁾.

References:

1. Cumming WJK, Fulthorpe J, Hudgson P, et al. Color Atlas of Muscle Pathology. London: Mosby-Wolfe, 1994:113.
2. Gran JT, Myklebust G, Johansen S. Adult idiopathic polymyositis without elevation of creatine kinase: case report and review of the literature. *Scand J Rheumatol* 1993;22:94-6.
3. Pautas E, Cherin P, Piette JC, et al. Features of polymyositis and dermatomyositis in the elderly: a case-control study. *Clin Exp Rheumatol* 2000;18:241-4.