Puffy fingers and abnormal nail fold capillaries

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A 51-year-old woman was referred to the rheumatology department with a 2-month history of edematous hands. She had been experiencing Raynaud phenomenon for the past 5 years but her personal and family histories were otherwise unremarkable. She had neither joint pain nor rashes. On examination, we saw puffy fingers, periungual erythema, dilated capillaries and hemorrhages of the proximal nail folds in all fingers except her thumbs. The cuticles appeared thickened (Figure 1A). Notably, giant capillaries were visible (Figure 1A) and were more evident when viewed using a dermatoscope (Figure 1B). The patient had normal muscle strength. Serologic tests showed an antinuclear antibody titre of 1:640 (centromere pattern) and positive anticentromere antibodies. High-resolution computed tomography of the chest and echocardiography were normal. The patient fulfilled the 2013 American College of Rheumatology/European League Against Rheumatism classification criteria for systemic sclerosis.[1] We made a diagnosis of limited cutaneous systemic sclerosis and treated her with prednisone (10 mg/d), mycophenolate mofetil (0.5 g twice daily) and beraprost sodium (20 μg 3 times daily). After 3 months, her swelling had subsided, and the nail fold hemorrhages had partially resolved.

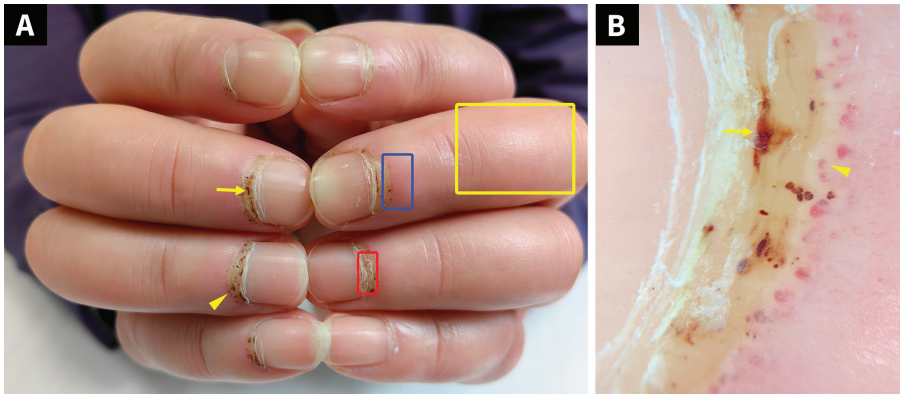

Figure 1: (A) Puffy fingers (yellow box), periungual erythema (blue box), dilated capillaries (yellow arrowhead) and hemorrhages of the proximal nail folds (yellow arrow), and ragged cuticles (red box) in a 51-year-old woman with limited cutaneous systemic sclerosis. (B) Dermoscopy showing giant capillaries (yellow arrowhead) and hemorrhages (yellow arrow) (magnification ×20).

Puffy fingers, Raynaud phenomenon and abnormal nail fold capillaries are typical features of the early phase of systemic sclerosis.[2] Nail fold capillary abnormalities, especially hemorrhages and giant capillaries, are sometimes visible to the unaided eye. To observe nail fold capillaries more clearly, placing a dermatoscope on the proximal nail fold can show capillaries appearing as small red dots or loops. Raynaud phenomenon and nail fold capillary abnormalities are associated with connective tissue diseases, particularly systemic sclerosis. Alternative diagnoses include mixed connective tissue disease and dermatomyositis. Mixed connective tissue disease is associated with a high titre of anti-U1RNP antibodies,[3] and synovitisor myositis are often present. For dermatomyositis, both cutaneous and muscle involvement are essential features. In people with systemic sclerosis, it is important to monitor closely for complications such as interstitial lung disease, pulmonary hypertension and digital ulcers, as these complications worsen prognosis.

References

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