

Nailfold microscopy findings in primary Sjögren's syndrome (SS)

KG Capobianco, CA von Mühlen

Pontifical Catholic University School of Medicine, Porto Alegre, Brazil

Introduction. Nailfold microscopy is a useful method in the diagnostic evaluation of patients with connective tissue diseases (CTD), mainly in those with Raynaud's phenomenon (RP), vasculopathy and/or vasculitis (1). Primary SS patients may show vascular symptoms like RP and small vessels vasculitis. There is no description in the medical literature of a distinct nailfold microscopy pattern in SS (2,3).

Materials and Methods. We studied 22 consecutive women with primary SS seen in a tertiary centre, selected according to the European Community criteria (1993). As controls, 14 women with rheumatoid arthritis (RA), 22 with systemic lupus erythematosus (SLE), 15 with scleroderma (SCL), and 24 with primary RP were selected. Findings were recorded on microphotographs and blindly read by 2 observers.

Results. Qualitative variables like capillary blood pattern and distal halo did not distinguish between patients with primary SS and controls. Otherwise, quantitative variables significantly differed in patients with primary SS: number of capillaries/mm (primary SS patients with lower number than patients with primary RP, $p < 0.001$), but higher than in the SCL group, $p < 0.002$; deletion score (much higher in the SCL group, $p < 0.0002$); microhemorrhages (primary SS patients more than in RA patients, $p = 0.016$, but less than in SCL patients, $p = 0.035$); and the number of atypical capillaries primary SS with lower number than in SLE, $p < 0.0007$, but higher than in primary RP, $p = 0.022$. Most importantly, cluster analysis revealed a subgroup of 3 patients with primary SS and RP with scleroderma (SD)-like nailfold pattern (high deletion score, megacapillaries, diffuse hemorrhages). Those patients had less than 3 years of disease duration and important systemic manifestations (necrotising skin vasculitis, severe RP, peripheral neuropathy), and severe *sicca* symptoms, with high titer SS-A/Ro antibodies.

Conclusion. There is no typical capillary pattern in primary SS but the test may help either in the differential diagnosis or in the definition of a subgroup of primary SS patients with manifestations of severe vascular and systemic symptoms. The SD-pattern may not be specific for SCL, mixed connective tissue disease or dermatomyositis. Prospective studies are warranted to see if primary SS patients with SD-pattern may evolve into another specific CTD.

References

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