respectively, at basal temperature; 56±31, 99±51 PU, respectively at 36°C; p<0.05).

Conclusions Patients with SSc have a significantly blunted FBP compared with healthy subjects. Capillary reactivity to heating seems partially conserved. The degree of FBP correlates with the severity of nailfold microvascular damage.

REFERENCES

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8. Other topics

A124 IMAGING AND RHEUMATIC DISEASES: CORRELATION BETWEEN FINGERTIP BLOOD PERFUSION AND NAILFOLD CAPILLARY IMPAIRMENT IN SYSTEMIC SCLEROSIS

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Background Microvascular involvement is a key feature of systemic sclerosis (SSc). Nailfold capillaroscopy is widely used to evaluate capillary morphology. As well as laser Doppler flowmetry (LDF), it is a technique for measuring the peripheral microvascular perfusion.1 2 The aim of this study was to investigate possible correlations between fingertip blood perfusion (FBP) by LDF and different degrees of microvascular damage by nailfold videocapillaroscopy (NVC) in SSc patients.

Methods Forty-six SSc patients (mean±SD age 65±13 years) and 16 healthy subjects (mean age 63±20 years) were enrolled into the study. NVC was performed in order to classify the patients into the proper pattern of nailfold microangiopathy, named 'early', 'active', or 'late' as previously reported.1 LDF (Perimed, Milan) was performed in all the subjects, analysing blood perfusion at 2nd, 3rd, 4th and 5th fingertip bilaterally (middle area), both at finger basal temperature and after heating the probe at 36°C to evaluate capillary reactivity. The results are expressed as perfusion units (PU). Statistical analysis was carried out by non-parametric tests.

Results FBP was significantly lower in SSc patients than in healthy subjects (40±41 vs 123±95 PU, p<0.05). The heating of the probe at 36°C induced a significant increase in the FBP in all the subjects (p<0.001), but the variation (delta) was significantly lower in patients with SSc than in healthy controls (23±28 vs 34±53 PU, p<0.05). SSc patients with the 'late' NVC pattern of microangiopathy showed lower FBP than patients with the 'active' and 'early' patterns (31±44, 48±62, 60±96 PU, respectively, at basal temperature; 60±45, 103±38, 169±39 PU, respectively, at 36°C; p<0.05). Furthermore, a negative correlation was observed between FBP and SSc duration. Also, the variation (delta) of the perfusion after heating the probe to 36°C was significantly lower in SSc patients with the 'late' pattern of microangiopathy than in those with the 'active' and 'early' NVC pattern (15±10, 36±21, 99±56 PU, respectively; p<0.05). Limited by the sample size, no significant correlations were found between FBP and pulmonary, oesophageal or renal involvement in SSc patients; however, patients with a history or presence of digital ulcers had lower blood perfusion than those without (28±20, 48±30 PU,

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