

Arterial stiffness measured by pOpmetre® in patients with Systemic Sclerosis

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Introduction:

Systemic sclerosis (SSc) is a connective disease affecting connective tissue and vessels of any caliber. The affect of large arteries appears by a stiffness that can be an element of disease monitoring. The aim of this study was to evaluate the contribution of pOpmetre in the arterial stiffness measurement in patients with SSc.

Method:

It was a descriptive and prospective study carried out with scleroderma patients and control subjects. Anthropometric measurements were collected and associated to a questionnaire about demographic and clinical data. The finger-toe pulse wave velocity (ft-PWV) measured by pOpmetre® allowed to explore arterial stiffness.

Results:

Twenty patients and 26 controls were included in our study. Patients had higher heart rate ($p = 0.038$) and ft-PWV ($p = 0.001$). The ft-PWV was correlated with age in controls ($r = 0.69$; $p = 0.0001$) and showed a trend with systolic blood pressure ($r = 0.37$, $p = 0.09$) in patients' group.

Conclusion:

pOpmetre® is a simple and practical tool, highlighted an increase in arterial stiffness in patients with SSc by measuring the ft-PWV. It could play a role in this disease monitoring and in prediction of cardiovascular complications.