

## **PERIPHERAL ARTERIAL TONOMETRY IN PULMONARY VASCULITIS**

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Vascular wall inflammation in primary vasculitides seems to be associated with atherosclerosis progression resulting in multiple organs dysfunction. Pivotal role both in development of atherosclerosis and vasculitis plays endothelium. Endothelial dysfunction could be observed by measuring nitrogen dioxide mediated vessel dilation using method of peripheral arterial tonometry (PAT). PAT allows measuring reactive hyperemia mediated mostly by NO release as a response to vessel occlusion. The vasodilatory reaction depends on quality of endothelium which deteriorates in process of disease progression. The aim of the study was to estimate correlation between disease progression measured by Disease Entent Index (DEI) and vasodilatory endothelial function measured by Index of arterial reactive hyperemia (RHI) in 28 patients with systemic vasculitis with granulomatosis. RHI was measured using peripheral arterial tonometry by EndoPAT 2000 (Itamar). We found moderate negative correlation between DEI and RHI, -0,52 (Pearson coefficient,  $p < 0,05$ ). Impaired endothelial function assessed by RHI-PAT might help to predict systemic vasculitis with granulomatosis progression.