

## **COGNITIVE IMPAIRMENT IN PATIENTS WITH ARTERIAL HYPERTENSION WITHOUT CARDIAC INVOLVEMENT**

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Objective: To present a series of three patients suffering mild to moderate cognitive impairment and arterial hypertension (AH) without cardiac involvement. AH has been shown to cause a significant injury on small arteriolar vessels. Does, these is a pathophysiological mechanism underline that increase risk for both stroke and myocardial infarction. It has also been shown that the vascular pathological injury leading to cognitive impairment has to be small vessel sclerosis. Materials and Methods: Three patients who have been previously diagnosed with AH and who were admitted to Medica Sur Hospital due to a occlusive cerebrovascular disease and who bore signs of cognitive impairment. Imaging studies were required, Magnetic Resonance Imaging (MRI), Echocardiography, and Transcranial Ultrasound. Clinical blood tests and Electrocardiogram were required as well. Results: In all three patients severe cerebral atrophy has been shown after MRI studies. The Transcranial Ultrasound reveals a stenotic pattern on the intracranial vascular reactivity. These patients did not have hypertrophic non dilated cardiomyopathy. The neuropsychological assessment proves a mild to moderate cognitive impairment. No renal failure was documented. Discussion: Yet these patients has suffer ischemic stroke, it is a very rare finding cognitive impairment which correlate with arteriolar sclerosis, even more the most striking finding was the absence of cardiac involvement, a tentative explanation for these is a protective estrogen mechanism on myocardium. It is clear that these results need prospective clinical studies in order to corroborate our findings.