## 22. IS IT SILENT MYOCARDIAL ISCHEMIA?! - CASE REPORT

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Introduction: Silent myocardial ischemia is defined as objective documentation of myocardial ischemia in the absence of angina or anginal equivalents. Silent ischemia is an intriguing phenomenon and is causally related to serious or fatal cardiac events. Histopathological studies give credence to the idea that recurrent ischemia may cause irreversible myocardial changes related to the development of fibrotic myocardium which would act as an ideal substrate for the development of life-threatening arrhythmias or lead to the development of congestive heart failure.

Case report: We present the case of a 62 year old patient, which prior to a non-cardiac surgical procedure discovered accidentally ischemic modifications on the ECG (ST segment depression and negative T waves in V3-V6). Thus, he was sent for further cardiological investigations. The patient had no history of cardiovascular pathology, being an occasional smoker. During the clinical examination the only thing that stood out was that he had a BMI of 27.4 kg/m². Hematological analyses showed a slightly raised total cholesterol and LDL-cholesterol. The echocardiography was normal and excluded a left ventricular hypertrophy or an obstructive hypertrophic cardiomyopathy. He was referred to an ECG exercise stress test that revealed positivation of T waves but with no symptoms of angina during the test. Finally, in order to certify coronary lesions, the patient was submitted to a computerized tomographic angiography that showed permeable arteries, with no stenosis.

Discussions and Conclusions: Considering all the information mentioned above, the case of this patient is challenging because of the ischemic modifications on the EKG with no organic underneath causes. In the future, the patient will continue the scheduled follow-up in the clinic.

## 23. DETERMINATION OF VASO-REGULATOR'S CONCENTRATION LEVEL IN MEN AND WOMEN WITH ESSENTIAL HYPERTENSION

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**Introduction**: The role of endothelin-1 (ET-1) as vasoconstrictor (VC) and marker of vascular endothelial dysfunction has been well studied, however the properties of vasodilator (VD) C-type natriuretic peptide (CNP) continue to be explored. We can assume that their ratio reflects the balance VD / VC.

**Purpose and objectives:** Study of the correlation between concentrations of CNP and ET-1 in male and female patients with essential hypertension (EH).

Materials and Methods: We have examined 119 men and 139 women, including 79 healthy men (mean age  $54.64 \pm 0.40$  years) and 80 women ( $57.49 \pm 0.48$  years) of the control group. In 40 men (mean age  $55.01 \pm 0.36$  years) and 50 women ( $56.91 \pm 0.36$  years) AH II-III degree was diagnosed. In all examined patients the levels of CNP and ET-1 were determined by immunoenzyme method. We have also calculated patient's correlation index using CI (SNP/ET-1).

**Discussion results**: It was revealed that the quantity of CI in males of the control group was lower than in women:  $(1.39 \pm 0.02 \text{ u})$  and  $(1.44 \pm 0.04 \text{ u})$ , respectively. The CNP level was higher in men, and ET-1 in females (p  $\leq 0.05$ ). Significant CI differences depending on the sex of the patients were not identified.

Conclusion: Changes in the levels of CNP and ET-1 in the blood of men and women were differently reflected. CI was lower in hypertensive patients than in the control groups, indicating the predominance of vasoconstrictor concentration compared with healthy individuals.

CNP/ET-1 index can be used to diagnose hypertension.

Keywords: Vaso-regulators, essential hypertension