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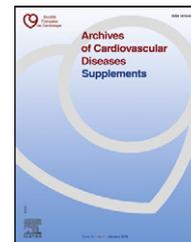
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04 – Hormones

Endocrine hypertension in an internal medicine department



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Introduction Endocrine arterial hypertension (HT) is rare; its overall prevalence does not exceed 4% of hypertensive patients. Research interest in endocrine HT is due to the severity of some life-threatening, potentially curable and reversible forms of HT. We aimed to determine the clinical, paraclinical, etiological and therapeutic profile of secondary endocrine HT in patients treated in our department of internal medicine.

Results Twenty-seven patients were diagnosed with endocrine HT; 11 males and 16 females, mean age 42 years old. HT duration ranged from one month to 24 years. 13 cases of neuroendocrine tumors were diagnosed: 11 pheochromocytoma and 2 para-ganglioma. Patients with neuroendocrine tumors had the classic triad of diaphoresis, headache and palpitation associated with catecholamine/metanephrine excess. The tumor was localized by magnetic resonance or 123 I-MIBG imaging and the diagnosis was confirmed by pathological examination after surgery. We diagnosed 6 cases of Conn adenoma, 5 cortical carcinomas, 1 pulmonary cancer's adrenal metastasis, 1 adrenal hyperplasia and 1 hyperaldosteronism secondary to treatment with Ergoloid. The diagnosis was confirmed by hormone dosage evidencing elevated plasma aldosterone levels and decreased plasma renin activity in cases of Conn adenoma and adrenal hyperplasia, hyper-cortisolemia in cases of cortical adenoma, cortical carcinoma and pulmonary cancer's adrenal metastasis. The tumor was localized by CT scan and the diagnosis was confirmed by pathological examination after surgery. Blood pressure normalization was found among 16 patients after surgery.

Conclusion Endocrine HT has many etiologies possibly responsible for high morbidity and mortality, especially when not properly diagnosed or treated. The potentially curable nature of endocrine HT in more than two thirds of cases, demonstrates the importance of early diagnosis of every severe HT resistant to treatment or in the presence of suggestive clinical, biological or radiological signs.

Disclosure of interest The authors declare that they have no competing interest.

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Variations of oxidized ldl and adipocytokine during metabolic syndrome in hypertensive patients



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Oxidative stress, obesity and metabolic syndrome (MS) are often combined in the pathophysiology of hypertension. The aim of this study was to quantify the plasma levels of leptin, adiponectin, and oxidized LDL in patients with essential hypertension, and to correlate these parameters with the metabolic disorders.

Materials and methods Our prospective study was carried out in 160 non-diabetic hypertensive patients, age: 57 ± 8.49 years, 118 women and 42 men. Fasting biomarkers were measured: glycaemia, renal balance, total cholesterol, triglycerides, HDLc, LDLc, CRP and insulinemia. Insulin resistance was assessed using the homeostasis model (HOMA-IR), coupled with anthropometric measurements (weight, BMI, waist circumference); ELISA assayed Leptin, adiponectin and oxidized LDL. Data on demographic characteristics, blood pressure and other variables were collected.

Results and discussion The prevalence of metabolic syndrome (MS) in our series was 58%, 53% of patients were sedentary, 40% overweight and 39.25% of them obese. The insulin resistance evaluated by the HOMA-IR was 37%. The concentrations of leptin were 38.22 ± 24.31 ng/ml in MS patients and 33.34 ± 19.62 ng/ml in patients without MS and higher in obese patients. There was a statistically significant difference in adiponectin dosages between groups ($P=0.046$), 6.92 ± 3.18 ng/ml in for the MS group, and 8.74 ± 5.02 ng/ml in patients without MS. Oxidized LDL levels were 4.58 ± 3.74 μ g/ml in MS patients and 2.16 ± 1.41 μ g/ml in patients without MS ($P < 10^{-5}$). In the MS group a positive correlation was found between leptin and waist circumference ($P < 0.0001$), BMI ($P < 0.0001$), TG ($P=0.02$) and HDLc ($P < 0.0001$), no significant correlation was found between adiponectin and HOMA-IR.

Conclusion Our preliminary data revealed an elevation of oxidized LDL and leptin in hypertensive patients with metabolic syndrome. Adipo-cytokines have an important metabolic role; they interact directly with insulin signalling pathways.

Disclosure of interest The authors declare that they have no competing interest.

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