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Arterial hypertension and diabetes association in the elderly

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Background High blood pressure is common in the elderly diabetic, responsible for an increase in cardiovascular risk and an acceleration of the degenerative complications of diabetes.
Purpose The aim of this study was to determine the characteristics of hypertension in elderly diabetic subjects and to study its repercussions.
Methods Our descriptive study was performed in 60 hypertensive diabetic patients over than 65 years of age, followed in our department. Hypertension was defined as arterial pressure $\geq$ 140/90 mmHg. A complete clinical examination and a standard biological assessment were performed for each patient.
Results The mean age of the patients was 68.72 years; 61.2% of patients were between 60 and 65 years of age. The mean duration of diabetes progression was 14.2 years and 72% of patients received insulin therapy. The majority (91%) of these patients had uncontrolled diabetes; the average HbA_{1c} was 10.2%. The diagnosis of diabetes preceded that of hypertension in 73.6% of cases. Thirty-three percent of our population had an uncontrolled hypertension. Patients had on a salt-free diet in 18.1% of cases and a dietary salt restriction in 21.2% of cases. Among our hypertensive patients, 29.9 received a monotherapy and 44.2% a dual therapy. Dyslipidemia was found in 51.6% of our patients. A microalbuminuria was noted in 32.3% of patients. Retinopathy was found in 48% of patients, neuropathy in 34.6%. There is a history of stroke in 3.8% of cases and a history of myocardial infarction in 2.2% of cases. Coronary insufficiency was confirmed in 5.8% of cases, unexplored chest pain was found in 26.6% of cases. Intermittent claudication was noted in 24.2% of cases. This claudication was explored and confirmed in 2% of cases.
Conclusion Vascular metabolic complications are serious in hypertensive elderly diabetic subjects; thus, multidisciplinary care and regular monitoring is required to detect these complications early and improve life expectancy.
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Predictive factors of macroangiopathy in type 2 diabetic patients

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Aims Cardiovascular complications are the most prevalent cause of mortality in patients with type 2 diabetes mellitus. The aim of our study was to determine the risk factors related to macroangiopathy among type 2 diabetic patients.
Methods This was a cross-sectional study conducted among 71 patients with type 2 diabetes mellitus between March 1 and September 30, 2017. Patients were divided into two groups according to the presence or absence of macroangiopathy. The examination included full medical histories, physical examination and laboratory tests in particular brain natriuretic peptide (BNP) measurements.
Results Thirty-eight patients had at least one macrovascular complication. The univariate analysis evidenced a significant association between macro-angiopathy and male gender ($P = 0.029$), $HbA_{1c} > 9.5\%$ ($P = 0.008$), the cumulative number of cardiovascular risk factors > 5 ($P < 10^{-3}$), hypertension, presence of micro-angiopathy ($P < 10^{-3}$) and BNP plasmatic level > 24 pg/mL ($P = 0.007$). Multivariate regression analysis showed that cumulative cardiovascular risk factors > 5 (OR = 13.9 [95% CI: 1.4—137.6], $P = 0.024$), presence of microangiopathy (OR = 22 [95% CI: 2.2—215.4], $P = 0.008$) and $HbA_{1c} > 9.5\%$ (OR = 36.6 [95% CI: 2.6—505]; $P = 0.007$) were predictor factors of macroangiopathy among patients with type 2 diabetes mellitus.
Conclusion Cardiovascular diseases in our population were the consequence of the additive effects of traditional risk factors with the participation of chronic hyperglycemia.
Disclosure of interest The authors declare that they have no competing interest

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Non-alcoholic fatty liver disease and cardiovascular risk in patients with type 2 diabetes mellitus

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Aims Non-alcoholic fatty liver disease (NAFLD) is the most common chronic liver disease in type 2 diabetes mellitus (T2DM). In addition to its liver complications, it is associated with increased cardiovascular risk. The aim of our work was to assess the relationship between NAFLD and cardiovascular disease risk (CVDR) in a group of patients with T2DM.
Methods This was a cross-sectional study conducted among patients with T2D aged between 35 and 70 years old. Detailed medical history, laboratory investigations and measurements of systolic and diastolic blood pressure, weight and height were done for each patient. NAFLD was diagnosed using abdominal ultrasound examination. The assessment of the ten years CVDR was performed by using the Framingham Risk Score. Patients were classified as low, moderate or high risk, corresponding to < 10%, 10—20% and > 20% respectively.
Results We included 43 diabetic patients (25 men and 18 women) with a mean age of 59.1 ± 6.5 years. The average duration of diabetes was 12 ± 8.6 years. NAFLD was observed among 49% of patients. The average Framingham Risk Score was 24.6 ± 10.5%. CVDR was moderate in 33% and high in 67% of patients. NAFLD was noted among 29% of patients having a Framingham Risk Score between 10 and 20% and among 59% of patients with a Framingham Risk Score > 20% ($P = 0.065$). Obesity was significantly more frequent among patients with NALFD than in those who were free (90% vs. 32%, $P < 10^{-3}$). The prevalence of smoking (21% vs. 21%), high blood pressure (81% vs. 64%) and dyslipidemia (79% vs. 72%) were statistically comparable between patients with and without NAFLD, respectively.
Conclusion In our study and in contrast to the data from the literature, CVDR was not increased in T2DM patients having NAFLD. The lack of relationship between cardiovascular disease risk and NALFD