parasternal long axis by M-Mode echocardiography. Early morning urine was analysed for microalbuminuria.

Results The hypertensive patients and controls were comparable for age and sex, but had significantly higher body mass indices, Left ventricular mass (LVM) and an altered diastolic function. Hypertensive patients had significant increase in the left atrial longitudinal diameter (50.0 mm versus 47.4, = 0.045 mm), surface area (17.9 cm^2 versus 15.5 cm^2, $P = 0.003$) and volume (52.4 mL versus 43.8 mL, $P = 0.002$). Fourteen hypertensive patients (26.9%) had left atrial enlargement compared to 1(2.5%) in the control group. Diastolic dysfunction ($P = 0.008$) was the only independent predictor of LA size and LAE. There was a no correlation between microalbumin and left atrial size.

Conclusion Changes in the left atrial size in the early phase of hypertension are characterised by an increase in the left atrial length, surface area and volume. Left atrial remodelling in hypertension is an evidence of the chronicity of diastolic dysfunction. Microalbuminuria does not predict left atrial remodelling.

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Erectile dysfunction in a group of congolese hypertensive patients

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Objectives To determine the frequency of the erectile dysfunction (ED) among hypertensive patients; to identify the predictive factors.

Patients and methods The study was a prospective one, conducted at the University Hospital of Brazzaville, from May 1st to July 31st, 2015. It included treated hypertensive patients presenting an ED, defined as the incapacity to obtain or maintain an erection sufficient for satisfactory sexual activity. The IIEF-5 score made it possible to specify the degree of severity of ED.

Results On 265 hypertensive patients, 172 (65%) presented an ED. The average age was 58.2 ± 9.7 years. The main associated cardiovascular risk factors were an overweight/obesity in 99 cases (37.4%), a sedentariness in 90 cases (34%), a diabetes in 50 cases (19%). The arterial hypertension (AHT), old of 6.7 ± 5.8 years, was treated by a bitherapy in 129 cases (48.7%), a tritherapy in 102 cases (38.5%), a monotherapy in 18 cases (6.8%), at least a quadritherapy in 16 cases (6%). The principal therapeutic classes used were an ACE inhibitor/ARB in 213 cases (81%), a calcium channel blocker in 205 cases (78%), a thiazidediuretic in 137 cases (52.1%), and a betablocker in 82 cases (31%). ED, severe in 124 cases (72%), and moderate in 48 cases (28%), consisted of a difficulty of maintaining erection in 78 cases (45.3%), a difficulty of obtaining erection in 30 cases (17.4%), and the two partners in 64 cases (37.2%). In multivariate analysis, only the age, seniority of AHT, and the existence of diabetes were the predictive factors of ED.

Conclusion This study shows that ED is a frequent comorbidity among hypertensive patients. The early and effective assumption of responsibility of the AHT, as well as other cardiovascular risk factors whose diabetes, would make it possible to reduce the frequency of it, thus improving quality of life of the hypertensive patients.

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

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The role of nesfatin-1 in the development of insulin resistance in hypertensive patients

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Comorbidity of hypertension and metabolic disorders increases cardiovascular risk substantially. Insulin resistance (IR) is an important pathogenetic link in these changes. It is important to research the effect of metabolically active substances in such patients on changes in insulin resistance.

Purpose To investigate the association between plasma nesfatin-1 (N1) levels and the IR-indices in patients with essential hypertension (EH).

Methods A total of 83 patients with EH were examined. The group 1 consisted of 27% of patients with EH and type 2 diabetes mellitus. The group 2 included 28% of patients with EH and prediabetes by criteria of the World Health Organization. Patients of the group 3 (45%) had EH and did not have dysglycemia. Insulin and N1 levels were determined by enzyme immunoassay method. The main indices of IR were calculated, such as HOMA-IR, HOMA-βcell, Caro, QUICKI, FIRI, Belfiore using standard formulas.

Results Patients with concomitant dysglycemia had significantly higher values of insulin, indices HOMA-IR, Caro, FIRI and lower HOMA-βcell, QUICKI and Belfiore ($P < 0.001$). There weren't any significant differences between N1 levels in groups. N1 had a negative correlation with postprandial glucose ($r = -0.193$, $P < 0.05$), especially in the case of concomitant prediabetes ($r = -0.381$, $P < 0.05$). Patients with higher level of N1 had higher values of HOMA-βcell ($\chi^2 = 7.85$, $P < 0.05$) and lower Caro ($r = -0,107$, $P < 0.1$) indices. There were correlations between N1 and insulin levels ($r = 0,180$, $P < 0.05$), indices HOMA-IR ($r = 0.181$, $P < 0.05$), QUICKI ($r = -0.181$, $P < 0.05$), Belfiore ($r = -0.181$, $P < 0.05$) in group 3.

Conclusions There were the correlations between N1 and insulin level, IR-indices in patients with EH and normoglycemia. It may indicate the insulinotropic action of the peptide. The relationship between the level of N1 and the HOMA-βcell index may be due to producing of N1 by pancreas. No correlation has been established in the presence of prediabetes or type 2 diabetes.

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