according to the different explanatory hypothesis of pre-eclampsia pathophysiology: pro-calcitonin (bacterial infection hypothesis), functional AH50 and FH (alternative complement pathway—ACP hypothesis), ratio of antiangiogenicfactors sFLT-1/PLGF (anti-angiogenesis hypothesis), MDA (oxidative stress hypothesis), Il6 (inflammation hypothesis). We also took account for the season in which the sample was taken (theory of pseudo-allergy).

Results Our results showed that, contrary to the defendants of the theory of the ACP involvement such as Z. Prohászka's and A. Lynch's teams, ACP was not associated with renal impairment ($P = 0.350$). These later teams used quantitative ACP assays, whereas we used functional and interatomic tests with a higher level of evidence; this could explain this discrepancy. Unexpectedly we found that pre-eclampsia is a continuum of hypertension and normotension according to the increase in oxidative stress ($P = 0.002$) and to the ratio sFLT-1/PLGF $P = 0.001$). This reinforces the results of the A. Ahmed's team and the StAmP trial. Interestingly, hypertension was associated with the lowest rate of pro-calcitonin compared to normotensive and pre-eclampsia women ($P = 0.001$).

Conclusion We suggest that pre-eclampsia hypertensive women progress to renal failure when their oxidant stress levels and angiogenic ratio increase.

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

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Impact of polycystic ovarian syndrome (pcos) associated with hypertension on some metabolic markers

Khayra Mebarek[1], Samira Bouanane[1,*], Hafida Merzouk[1], Nabila Soufi[2], Fatima Zohra Baba Ahmed[1], Nassima Amel Malti[1], Nesrine Samira Karaouzene[1]

[1] Laboratory of Physiology, Physiopathology and Biochemistry of Nutrition, Department of Biology, Faculty of Natural and Life Sciences, Earth and Universe, University of Tlemcen 13000, Algeria

[2] Cardiology Department, CHU of Tlemcen 13000, Algeria

* *Corresponding author.*

E-mail address: sambouanane@hotmail.fr (S. Bouanane)

Background The polycystic ovary syndrome (PCOS) is multifactorial, consisting in hyper androgenic, ovulatory disorders and polycystic appearance of the ovaries. PCOS is a metabolic disorder associated with an increased risk of insulin resistance, hyper insulin blood level, central obesity, high blood pressure, type 2 diabetes, dyslipidemia and cardiovascular disease. The variability of its expression and the difficulty of precise definition hinders the visibility of this disease. Several studies have reported hypertension in obese patients with PCOS.

Purpose The aim of this work was to study the impact of the combination of hypertension and PCOS on the metabolic disturbances (hepatic, lipid and renal).

Methods We recruited 26 hypertensive patients with PCOS in the Tlemcen University Hospital and 30 healthy control women. After obtaining informed consent, the patients benefited from a biochemical assessment of the liver function (transaminases TGO, TGP), the renal function (uric acid, creatinine, urea), and the lipid profile (total cholesterol, LDL, triglycerides).

Results We observed abnormalities of hepatic metabolism, evidenced by elevated levels of transaminases (TGO, TGP), kidney damage by increased creatinine and urea levels, with altered lipid profile in hypertensive women with PCOS compared to control women.

Conclusion In conclusion, PCOS associated with hypertension is associated with numerous metabolic dysfunctions (dyslipidemia, kidney and hepatic impairment). Thus, early dietary and medical management of PCOS is needed to reduce associated metabolic complications.

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

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Characteristics of arterial hypertension in menopausal diabetic women

Ramla Mizouri*, Imen Rezgani, Imen Sebai, Marwa Khiari, Hajer Zahra, Fatma Boukhayatia, Yousra Hatira, Aroua Temssek, Faika Ben Mami.

National Institute of Nutrition of Tunis, Service C, Tunis, Tunisia

* *Corresponding author.*

E-mail address: mizouriramla@gmail.com (R. Mizouri)

Background The estrogenic deficiency during menopause is not only responsible for the onset of metabolic disorders, but also exposes to an increased risk of osteoporosis and cardiovascular complications.

Purpose The aim of this study was to assess the prevalence, degree of control and comorbidities of hypertension in menopausal women.

Methods Our descriptive cross-sectional study included 80 post-menopausal hypertensive diabetic women, mean age: 62.71 ± 14.2 years; amenorrhea period was longer than 12 consecutive months. The average age of onset of menopause was 49.6 ± 4.8 years. Patients underwent a clinical examination, a standard biological assessment and a diabetes outcome report. All anthropometrics data were noted.

Results A total of 82.3% patients had a SBP > 150 mmHg and 42.2% a DBP > 90 mmHg. The percentage of smoking patients was 5.7%. A sedentary lifestyle was noted in 22.2% of cases. The patients were on a salt-free diet in 16.1% of cases and on a dietary salt restriction in 18.2% of cases. The mean duration of diabetes progression was 13 ± 7.31 years. Mean HbA_{1c} was $9.2 \pm 5.09\%$. The majority (88.7%) of patients had a type 2 diabetes. Of these patients, 66.9% had a controlled hypertension. Overweight or obesity was found in 42.9% of patients, the mean waist circumference was 106 ± 14.09 cm and the mean BMI 29.45 ± 6.23 kg/m^2. A dyslipidemia was noted in 52.8% of the patients; the mean LDL-cholesterol level was 1.17 ± 0.12 g/L. There was an history of stroke in 8.8% of cases and an history of myocardial infarction in 5.9% of cases. Coronary disease was confirmed in 14.8% of cases, unexplored chest pain was found in 26.6% of cases. Intermittent claudication was noted in 28.2% of patients; this claudication was explored and confirmed in 3% of cases.

Conclusion High blood pressure is a public health problem most often associated with other cardiovascular risk factors. An evaluation of cardiovascular risk is necessary in postmenopausal hypertensive diabetic women and effective management of risk factors is recommended.

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

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Food consumation and redox status in hypertensive women with type 2 diabetes

W. Nacer[1], F.Z. Baba Ahmed[1,*], H. Merzouk[1], S. Bouanane[1], B. Benkelfate[1], N. Soufi[2]

[1] Department of Biology, Faculty of Natural and Life Sciences, Earth and Universe, University Abou-BekrBelkaïd, Tlemcen 13000, Algeria

[2] Cardiology Department, CHU Tlemcen, Algeria

* *Corresponding author.*

E-mail address: fatimazohra_7@yahoo.fr (F.Z. Baba Ahmed)

Objectives The pathogenesis of hypertension in diabetics is complex and involves several biological and environmental factors as