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three groups depending on whether they were treated with ACE-inhibitors/CCBs/Thiazide, ARBs/CCBs/Thiazide or Perindopril/Amlodipine/Indapamide, either with separate drugs or fixed pill combinations. A further group of age- and sex-matched volunteers was selected as control and included patients receiving other antihypertensive medications. Long term effects of different antihypertensive medications were compared among the pre-defined groups.

**Results:** On long-term, combination treatment with renin-angiotensin system (RAS) modulators, CCBs and thiazide/thiazide-like diuretics was associated with better control of diastolic BP and lipids than other triple combination antihypertensive medication. Patients treated with Perindopril/Amlodipine/Indapamide did not experience any age-related increase in total cholesterol. Moreover, during the follow-up they neither developed type 2 diabetes nor had a need for a greater number of anti-hypertensive drugs to improve BP control.

**Conclusions:** Combination treatment with RAS modulators, amlodipine and thiazides/thiazide-like diuretics is more effective than other combination antihypertensive medications for lowering the diastolic BP and has a better impact on lipids. Perindopril/Amlodipine/Indapamide is associated with better lipids’ profile than any other considered combination antihypertensive medication.

**EP293 / #388, TOPIC: ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-01 EPIDEMIOLOGY OF CARDIOVASCULAR DISEASES AND RISK FACTORS, POSTER VIEWING SESSION.**

**ASSOCIATION OF COGNITIVE FUNCTION WITH OXYTOCIN AS A SOCIAL HORMONE IN A COMMUNITY DWELLING JAPANESE WOMEN; UKU STUDY**

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**Background and Aims:** Cognitive impairment leads to loss independence in daily activities. Maintain of cognitive function keeps daily high living activity. Oxytocin is an essential hormone for mammalian labor and lactation. The relationship between oxytocin and social cognition is supported by impairment of social recognition, which is associated with learning and memory integrity, in animal study. We investigated whether oxytocin levels are associated with cognitive function.

**Methods:** Subjects were 219 residents (90 men and 129 women) who participated in a health check-up examination in Uku Town in Sasebo city in 2016. Oxytocin concentrations were measured in 129 women and using radioimmunoassay. Cognitive function was assessed by Mimi-Mental State Examination (MMSE).

**Results:** Cognitive dysfunction was defined as smaller than 26 MMSE scores. Mean plasma oxytocin levels were 7.3(3.0-69.5) μU/ml. Mean MMSE scores were 28.2±2.3 points. The subjects with normal cognition were 110, and those with cognitive dysfunction were 17. Mean oxytocin levels in 17 subjects with cognitive dysfunction were much higher than in 110 subjects with normal cognitive function (8.0μU/ml) (p=0.67). In the linear regression analysis, MMSE was related to age (p=0.001; inversely) whereas; MMSE was not related to oxytocin (p=0.223). In the multiple regression analysis after adjustment for age, MMSE was not associated with oxytocin (p=0.357).

**Conclusions:** This study demonstrated that cognitive dysfunction was not associated with oxytocin levels in women. A prospective study is needed to examine the causal relationship between cognitive dysfunction and oxytocin including men.

**EP294 / #1164, TOPIC: ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-01 EPIDEMIOLOGY OF CARDIOVASCULAR DISEASES AND RISK FACTORS, POSTER VIEWING SESSION.**

**EPIDEMIOLOGY OF CEREBROVASCULAR DISEASE AMONG THE ADULT POPULATION OF THE PRINCIPAL CITY: RESULTS OF A ONE-DECADE PROSPECTIVE COHORT STUDY**

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**Background and Aims:** Little to nothing is known about the epidemiology of cerebrovascular disease (CVD) among the adult population of the principal city and the capital of the largest European County, Ukraine during the last decade. We aimed to conduct a prospective analysis of the epidemiology of CVD among the adult population of Kyiv City (metro area population 2,988,000), Ukraine for the last 12 years.

**Methods:** During the last decade, we have prospectively collected data to identify all inpatient and outpatient adults with CVD in the capital of Ukraine, Kyiv. Multiple overlapping sources were used to analyze sectoral statistical reports of CVD in Kyiv City, Ukraine from 2009 to 2020. The statistical method and the method of systematic approach were applied.

**Results:** We established that during the last 12 years there was a decrease in the incidence of CVD among the adult population of Kyiv (reduction of 1.83 times (p<0.05) with t reliability criteria 26.89). However, the incidence remains high (476.62 per 100,000 population). At the same time, the prevalence of CVD remains stable (with small fluctuations over the years of observation and was lower than the average in Ukraine (7967.2 in 2018)), and among the working-age population tends to increase. In the structure of morbidity traditionally in all years, women prevailed in a ratio of 1.4-1.5:1.0 to men

**Conclusions:** A significant reduction in the incidence of CVD in the adult population of Kyiv during the last 12 years has been established. This might be caused by increased CVD risk factors prevention work.

**EP295 / #810, TOPIC: ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-01 EPIDEMIOLOGY OF CARDIOVASCULAR DISEASES AND RISK FACTORS, POSTER VIEWING SESSION.**

**THE MANAGEMENT OF PATIENTS WITH CHRONIC CARDIOVASCULAR THERAPIES IN LOMBARDY REGION: THE IMPACT OF THE COVID-19 PANDEMIC**

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**Background and Aims:** The COVID-19 pandemic has posed major challenges to healthcare systems and public policies. We aimed to investigate its impact on the management of chronic cardiovascular therapies using administrative databases of Lombardy Region.
Methods: The study period between January and June 2020 was compared with the control period January-June 2019. For all adult patients (>40 years) with at least one prescription of the selected drugs, the percentage change in drug consumption, adherence to therapy and access to healthcare services (blood tests, diagnostic investigations, or specialist visits for disease monitoring) was evaluated.

Results: A total of 911,566 patients on lipid-lowering therapy, 2,147,386 on antihypertensives, 392,678 on antidiabetics and 621,976 on anticoagulants were enrolled and compared with 879,881, 2,128,334, 381,752, and 601,204 controls, respectively. Overall, there was a small change in the number of dispensed packages (+3.8%, -1.8%, -5.9%, -5.2%, respectively); however, in all the cohorts, a slight increase was observed in the first two bimesters, with a sharp decrease in May-June (-6.7%, -11.4%, -21.3%, -22.6%, respectively). Likewise, adherence to treatments showed an increase in March-April, and a reduction during the following two months. Conversely, there was a dramatic drop in healthcare services utilization in each patient cohort, with a negative spike in March/April (-65.2%, -66.0%, -63.5%, -53.9%, respectively).

Conclusions: The COVID-19 pandemic has negatively affected the access to healthcare services by patients with chronic cardiovascular diseases. We observed a tendency to accumulate medicines at the beginning of the lockdown, and a decreased use of health services for disease monitoring compared to the control period.