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ÚSTNÍ SDĚLENÍ

CORONARY ARTERY DISEASE SEVERITY AND CARDIOVASCULAR RISK FACTORS

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Background: It is common knowledge that cardiovascular risk factors are strong predictors of coronary artery disease but their association with the disease severity remains unclear and rather controversial.
Aims: To assess the prevalence of cardiovascular risk factors in patients with documented coronary artery disease and to identify which ones are related to multivessel disease.
Methods: A total of 849 patients referred to our catheterization laboratory were analyzed. Coronary artery disease was documented in 548 patients. Disease severity was determined from the results of the coronary angiogram based on the presence or absence of multivessel disease (two- or three-vessel disease).
Results: A total of 849 patients (571 males, 278 females) with a mean age of 58.23 ± 10.28 years were evaluated. In the studied population (mean age 58.23 ± 10.28 years), hypertension, diabetes, and smoking were the most frequent modifiable cardiovascular risk factors (51%, 38.99% and 27.33% of patients, respectively). Multiple logistic regression analysis showed that diabetes OR = 2.45 (1.75–3.42; $p < 0.001$), hypertension OR = 1.42 (1.02–1.98; $p = 0.03$), male sex OR = 3.17 (2.23–4.51; $p < 0.001$), smoking OR = 2.24 (1.48–3.37; $p < 0.001$), age OR = 1.03 (1.01–1.04; $p < 0.001$) significantly increased the risk of multivessel disease. Obesity was an independent negative predictor, with an OR of 0.48 (0.29–0.79; $p = 0.004$). Other cardiovascular risk factors, obesity and dyslipidemia, were not associated with coronary artery disease extent.
Conclusion: Diabetes, smoking, and arterial hypertension emerged as the strongest modifiable risk factor predictor of multivessel disease in our patient population. The underlying mechanisms of these associations should be relevant to disease prevention.

NEW PREDICTORS OF CV RISK IN HYPERTENSIVE PATIENTS

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Aim: To analyze the predictive value of new cardiovascular (CV) risk factors for CV risk assessment in the adult Romanian hypertensive (HT) population.
Methods: Hypertensive adults aged between 40–65 years of age, identified in the national representative SEPHAR II survey, were evaluated by anthropometric, BP and arterial stiffness measurements: aortic pulse wave velocity (PWVao), aortic augmentation index (AIXao), reverse time (RT), and central systolic blood pressure (SBPao), 12-lead ECGs and laboratory workup. Values above the 4th quartile of mean SBP standard deviation (s.d.) defined increased BP variability. Log(TG/HDL-cholesterol) defined atherogenic index of plasma (AIP). Serum uric acid levels above 5.70 mg/dl for women and 7.0 mg/dl for men defined hyperuricemia (HUA). CV risk was assessed based on the SCORE chart for high CV risk countries. Binary logistic regression using a stepwise likelihood ratio method (adjustments for major confounders and collinearity analysis) was used in order to validate predictors of high and very high CV risk class.
Results: The mean SBP value of the study group was 148.46 ± 19.61 mmHg. Over forty percent of hypertensives had a high and very high CV risk. Predictors of the high/very high CV risk category validated by regression analysis were: increased visit-to-visit BP variability (OR 2.49; 95% CI 1.67–3.73), PWVao (OR 1.12; 95% CI 1.02–1.22), RT (OR 0.95; 95% CI 0.93–0.98), SBPao (OR 1.01; 95% CI 1.01–1.03) and AIP (OR 7.08; 95% CI 3.91–12.82).
Conclusion: The results of our study suggest that the new CV risk factors such as increased BP variability, arterial stiffness indices, and AIP are useful tools for a more accurate identification of hypertensive patients at high and very high CV risk.

PREDICTORS OF INCREASED ARTERIAL STIFFNESS IN HYPERTENSIVE PATIENTS

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Aim: To evaluate arterial stiffness in hypertensive patients and to identify predictors of increased arterial stiffness.
Method: 798 hypertensives identified in the SEPHAR II survey were evaluated by BP and arterial stiffness measurements: aortic pulse wave velocity (PWVao) and aortic augmentation index (AIXao), and a study questionnaire. Values above the 75th percentile of mean SBP standard deviation (s.d.) defined increased SBP variability. Log(TG/HDL-cholesterol) defined atherogenic index of plasma (AIP).
Results: Mean values of studied parameters were: PWVao 10.19 ± 2.22 m/s, AIXao 39.17 ± 16.59%, BP 149.96 ± 20.94/89.18

± 11.54, PP 60.99 ± 17.95 mmHg, HR 73.75 ± 10.89 bpm and SBP s.d. 7.73 ± 8.6 mmHg (24.9% of subjects with increased SBP variability), SUA 5.48 ± 1.47mg/dl, and AIP 0.38 ± 0.34. Factors associated with both increased PWVao and AIXao values were: age group, visceral obesity, increased SUA, and AIP levels, presence of at least 1 form of TOD, and the lack of BP control. While DM, dyslipidemia, increased SBP variability, microalbuminuria, and atrial fibrillation were associated only with increased PWVao, ischemic heart disease and stroke history were associated only with increased AIXao levels.
Conclusions: Age above 60 years, visceral obesity, dyslipidemia, increased SBP variability, SUA and AIP levels, the lack of optimal BP control and the presence of TOD may be considered as predictors of an increased arterial stiffness in hypertensive patients.

THE PROGNOSTIC ROLE OF INFLAMMATORY BIOMARKERS, D-DIMER AND MEAN PLATELET VOLUME IN HYPERTENSIVE PATIENTS WITH TYPE A ACUTE AORTIC DISSECTION

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Aims: To evaluate the prognostic role of C-reactive protein (CRP), white blood cells (WBC), fibrinogen, D-dimer, and mean platelet volume (MPV) in type A acute aortic dissection (AAD) and to examine whether they might help in risk stratification beyond the International Registry of Acute Aortic Dissection (IRAD) score.
Methods: Baseline biomarkers were determined in 54 predominantly hypertensive patients (pts) with type A AAD and evaluated for in-hospital mortality.
Results: The mean age of the pts was 69 years (63% men; 93% history of hypertension; median onset of symptoms before admission 2.3 h). 32 pts (59%) underwent emergency surgical repair, and the others were treated conservatively or died shortly after admission. 24 pts (44%) died during in-hospital stay. Non-survivors were older (77 vs. 62 years; $p < 0.001$) and less frequently received surgery (29% vs. 83%; $p < 0.01$). CRP was significantly higher in non-survivors (15.7 vs. 5.0 mg/l; $p < 0.001$) while WBC, fibrinogen, D-dimer, and MPV were comparable in both groups. After multivariable adjustment for age, gender, treatment strategy, time to admission, renal function, CRP, history of coronary artery disease, and prior statin use, the independent predictors of hospital mortality were age (OR 1.14; 95% CI 1.02–1.27), treatment strategy (OR 0.05; 95% CI 0.01–0.48), and CRP (OR 1.15; 95% CI 1.01–1.31). After adjustment for the IRAD score, treatment strategy and time of onset of symptoms, CRP (> 9.8 mg/l) remained independent predictors of mortality (OR 8.24, 95% CI 1.40–48.39). Addition of CRP to the IRAD score improved prediction of outcome, area under ROC curve increased from 0.74 to 0.89 ($p = 0.004$).
Conclusions: Admission CRP has an independent prognostic value in hypertensive pts with type A AAD and adds prognostic significance to the IRAD score.

ANTIHYPERTENSIVE DRUG THERAPY IN SWEDEN IN RELATION TO GENDER, AGE, AND COMORBIDITY

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Aims: To describe current antihypertensive drug treatment in Sweden in relation to gender, age, and comorbidity.
Methods: By use of the Stockholm regional healthcare data register comprising all healthcare consultations, hospitalizations and dispensed drugs for 2.1 million inhabitants in the Greater Stockholm region, we identified all persons 20 years and older with a recorded diagnosis of hypertension during 2009–2013, their comorbidity, and their dispensed antihypertensive drugs during 2013.
Results: We found 292 623 patients aged 20–109 (mean 63) years, 154 230 (53%) were female. The most common comorbidities in females were diabetes (17%), COPD (17%), and ischemic heart disease (11%), and in males diabetes (24%), ischemic heart disease (17%), and atrial fibrillation (13%). The most common antihypertensive drug classes in females and males were beta-blockers (39 and 38%; $p < 0.01$), calcium-channel blockers (29 and 34%; $p < 0.001$), ACE inhibitors (27 and 36%; $p < 0.001$), ARBs (30 and 29%; $p < 0.001$), and diuretics (31 and 21%; $p < 0.001$), respectively. The use of beta-blockers and diuretics increased, and of ACE inhibitors, ARBs and calcium-channel blockers decreased with older age (all $p < 0.001$). Beta-blockers were more common with concomitant ischemic heart disease, atrial fibrillation, and heart failure (70, 74, and 71%, respectively).
Conclusions: The current results, similar to our previous findings 2004–2008 in 74 751 hypertensive patients in the Swedish Primary Care Cardiovascular Database (SPCCD; *Hasselström, et al, Blood Pressure 2014;23:116*), suggest persisting gender differences in drug therapy. Age and comorbidity influence drug therapy but cannot fully explain these gender differences, according to our previous findings in SPCCD (*Ljungman, et al, J Hum Hypertens).*

POSTERY

PROGNOSTIC SIGNIFICANCE OF DIPPING IN OLDER HYPERTENSIVE PATIENT

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Background and aims: Arterial hypertension doubles the risk of coronary heart disease, heart and kidney failure,

and peripheral arterial disease. Less variation in diurnal ambulatory blood pressure monitoring (ABPM) patterns may affect mortality outcome. Therefore, as hypertension occurs in over 95% of older subjects, prognostic value of dipping status in older hypertensive patients will be assessed.
Method: The retrospective study group consisted of 170 hypertensive patients aged 75 to 84 years, enrolled in the years 2005 to 2007. Baseline measures included 24 hours ABPM. Diurnal index and dipping status were calculated and stratified the group into dippers (40 patients, 23.5%), non-dippers (65 patients, 38.2%), and reverse-dippers (65 patients, 38.2%).
Results: During a 5-year observation after baseline, we observed 69 deaths (40.9%) from the whole group of 170 patients with 23 (35.4%) being non-dippers and 36 (55.4%) reverse dippers. Significant differences between the groups divided according to their diurnal dipping status were shown in survival time, in the number of recorded deaths, and in the night mean blood pressure. We identified and confirmed risk factors for all-cause mortality: age, mean systolic and diastolic blood pressure, diurnal index and dipping status (dipping, non-dipping or reverse-dipping).
Conclusion: Reverse-dippers and non-dippers have a worse prognosis compared to dippers.

CARDIOVASCULAR HEMODYNAMICS AS COMPLICATIONS PREDICTOR IN PREGNANCY

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Aims: During normal pregnancy, important hemodynamic changes take place in a pregnant woman. Looking for differences in blood pressure, heart rate, pulse wave velocity, ankle-brachial index, and electrocardiogram comparing healthy women with pregnant women, we wanted to find a possible predictive marker for complications during pregnancy.
Methods: In our study, we included 20 women, 10 pregnant women compared to 10 controls. Blood pressure (BP) and heart rate (HR) in supine, sitting and standing positions using automatic Omron monitor were measured. Ankle-brachial index was measured. 12-lead electrocardiogram recorded and using SphygmoCor system pulse wave velocity was measured. SPSS program (student T-test, χ^2 test or Fisher's exact test, paired samples t-test and statistical significance of Bonfferoni correction for BP in different body positions) was used for statistical analyses.
Results: Average age of pregnant women (pw) was 28.6 ± 4.5 y compared to healthy controls (hw) 25.3 ± 11 y. There were no significant differences in ambulatory systolic and diastolic blood pressure (in sitting position: 112.8 ± 9.9/67.1 ± 7.4 mmHg, 110.2 ± 6.0/63.9 ± 5.3 mmHg), but there was a significant difference in heart rate (81.3 ± 12.7 bpm vs. 65.8 ± 9.3 bpm; $p = 0.006$) for pregnant women vs. controls, respectively. We did not find any significant changes in pulse wave velocity (4.9 ± 0.7 m/s in pw and 5.6 ± 1.5 m/s in hw; $p = 0.221$ [NS]), ankle-brachial index ($p = 0.453$ [NS] right; $p = 0.458$ [NS] left) and electrocardiographic parameters (except heart rate) between the 2 groups. However, we did discover significant changes considering blood pressure and heart rate in different body positions inside each of the 2 groups. In *pregnant women*, we registered differences in SBP/DBP sitting vs. supine (–7.2/–4.1 mmHg), in SBP standing vs. supine (–6.3 mmHg), but there was no significant change in HR sitting vs. standing (–4.4 bpm, $p = 0.091$). In the group of *healthy women,* there was a significant change in SBP between sitting vs. supine position (–7.4 mmHg), significant change in DBP between sitting vs. standing (–9.4 mmHg), and a significant change in HR sitting vs. standing (–17.8 bpm).
Conclusions: In accordance with published data, we found higher HR in pregnant women, but no difference in BP. We expected an increase in PWV, but the detected differences were not statistically relevant, possibly due to the small number of participants or because of the fact that changes in arterial wall stiffness appear later in pregnancy or immediately before delivery. BP on arms and legs changes proportionately so we did not find any changes in the ankle-brachial index. Changes in BP and HR within each group are not consistent with expectations. Unfortunately, we could not find any predictive parameter which would indicate pregnancy complications. It could be due to the small number of included subjects or not enough sensitive parameters. In further studies, we plan to include 24h ABPM and echocardiography.

IMPROVED ENDOTHELIAL FUNCTION DURING NORMAL PREGNANCY

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Aims: To investigate endothelial function longitudinally throughout normal pregnancy.
Methods: We examined 60 healthy primiparae at weeks 14, 24, and 34 of gestation. Non-pregnant values were obtained nine months post partum. Central blood pressure and aortic stiffness were assessed by pulse wave analysis. Forearm endothelial dependent and independent vasodilation was assessed following ischemia-induced reactive hyperemia (FMD) and sublingual glyceryl trinitrate (GTN), respectively.
Results: There were 56 women (mean age 32 ± 3 years) with a normal course of pregnancy. FMD increased ($p < 0.05$) during pregnancy, from non-pregnant 7.2 ± 4.8 to 9.8 ± 3.9, 9.4 ± 3.4, and 8.2 ± 5.6% at weeks 14, 24, and 34, respectively, while GTN decreased ($p < 0.001$) from 24.3 ± 3.4 to 20.2 ± 3.4, 17.2 ± 6.1, and 18.1 ± 6.5%. Thus, endothelial

function index (FMD/GTN) improved during pregnancy ($p < 0.001$). Central systolic blood pressure decreased ($p < 0.001$) from 96 ± 8 to 91 ± 8, 90 ± 7, and 97 ± 7 mmHg and diastolic pressure changed ($p < 0.001$) from 65 ± 6 to 63 ± 6, 62 ± 6, and 69 ± 6 mmHg, while pulse wave velocity decreased ($p < 0.001$) from 6.0 ± 0.9 to 5.6 ± 0.7, 5.1 ± 0.7, and 5.6 ± 0.9 m/s, respectively. Brachial artery diameter at rest increased ($p < 0.001$) throughout pregnancy, from 3.1 ± 0.3 to 3.1 ± 0.34, 3.3 ± 0.4, and 3.5 ± 0.5 mm, respectively.
Conclusions: Endothelial dependent vasodilation improved during normal pregnancy, whereas GTN-induced vasodilatation was impaired, brachial artery diameter at rest increased, and aortic stiffness decreased. Thus, improved endothelial function contributes to the improved dilative capacity of the arterial vessels during normal pregnancy

INFLUENCE OF THREE MONTHLY COMBINED THERAPY WITH INDAPAMIDE AND LERCANIDIPINE ON TARGET ORGAN DAMAGE IN DEPENDENCE OF SALT SENSITIVITY IN HYPERTENSIVE PATIENTS

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Aim: To study the influence of three-month combined therapy with indapamide and lercanidipine on target organ damage in hypertensive patients in dependence on salt sensitivity.
Methods: The study included 38 patients with essential hypertension (EH), grades I–II (ESH/ESC, 2013), with a mean age 51.13 ± 11.27 years. Patients were treated with indapamide and lercanidipine. Salt sensitivity was tested using the Henkin and Charchenko methods. Based on results of salt-sensitivity testing, the patients were divided into two groups: with sodium-depended hypertension (SDH) (n = 27) and sodium-independent hypertension (SIDH) (n = 11). All patients underwent echocardiography and vascular ultrasound to determine endothelial-dependent vasodilatation (EDVD) and the level of microalbuminuria (MAU).
Results: High taste threshold of salt sensitivity and sodium-dependent hypertension after oral salt load was shown in 70% patients with EH. Patients with SDH were characterized by significant left ventricular hypertrophy (LVH) with diastolic dysfunction; a significant decrease of EDVD, and a tendency of increased MAU levels in comparison with the SIDH group. During therapy, significantly high antihypertensive efficacy of indapamide and lercanidipine was noted with achieved goal BP in 84.2% cases. The organ-protective efficacy of both drugs such as LVH regression, normalization of EDVD and MAU level, was better in patients with SIDH as was achievement of goal BP.
Conclusion: Three-month combination therapy with indapamide and lercanidipine was characterized by high antihypertensive and target organ-protective efficacy. Achievement of goal BP as well as target organ protection with indapamide and lercanidipine combination therapy were better in patients with SIDH.

EVALUATION OF CLINICAL EFFICACY OF AMLODIPINE AND INDAPAMIDE COMBINATION IN HYPERTENSIVE PATIENTS

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Aim: To study the antihypertensive and organ-protective efficacy of 12-week combination therapy with amlodipine and indapamide in hypertensive patients.
Design and methods: Our study included 25 hypertensive patients with I–II grade arterial hypertension (ESC/ESH 2013) with a mean age of 55.35 ± 8.0 years. Systolic (SBP) and diastolic blood pressure (DBP) was measured using the Korotkov method. M- and B-mode echocardiography was performed. Left ventricular mass index (LVMI) was calculated as the ratio of left ventricular myocardium mass to body surface area to diagnose left ventricular hypertrophy (LVH). Flow-mediated endothelium-dependent vasodilatation (EDVD) was measured during reactive hyperemia due to 5-minute brachial occlusion. Patients were treated with amlodipine with titration of daily dose from 5 to 10 mg and indapamide at a daily dose 2.5 mg during 12 weeks.
Results: Combination therapy with amlodipine and indapamide has been shown to have a high antihypertensive effect in the absence of any side effects. SBP reduction was –22.28 ± 5.01%: from 160.75 ± 7.99 mmHg to 124.74 ± 7.7 mmHg ($p = 0.000$) whereas DBP decreased by –17.25 ± 7.03%: from 99.0 ± 3.47 mmHg to 81.75 ± 5.2 mm Hg ($p = 0.000$). Ninety percent of patients achieved their goal BP. Moreover, EDVD improved significantly changing from 8.89 ± 3.64% to 10.95 ± 3.52% ($p = 0.001$). The cardioprotective efficacy of the two-drug combination resulted in LVH regression and improvement of LV diastolic dysfunction: LVMI: from 131.88 ± 30.73 g/m^2 to 117.88 ± 27.25 g/m^2 ($p = 0.01$).
Conclusion: The results of our study have shown high antihypertensive efficacy of amlodipine and indapamide combination therapy in hypertensive patients with significant regression of LVH and improved endothelial function.

PREVALENCE OF OBESITY IN BRNO, RESULTS OF THE KARDIOVIZE BRNO 2030 STUDY

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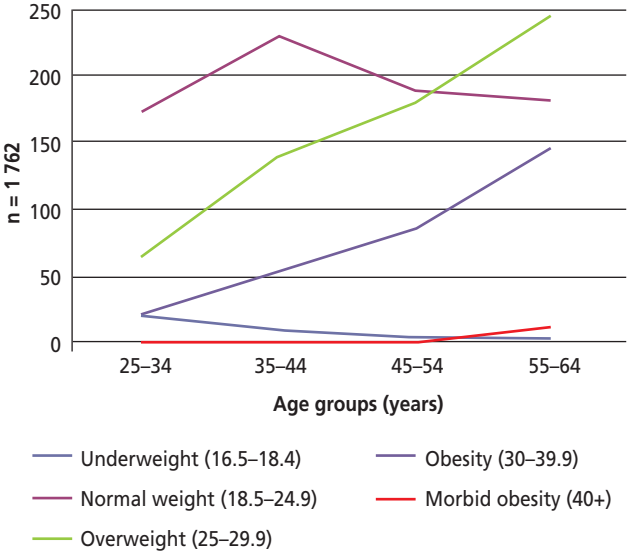
Objective: To assess obesity as a risk factor of cardiovascular diseases in a representative sample of population of Brno, the second largest city of the Czech Republic.
Design and method: A 1% population random sample aged 25–64 years was selected from the citizens of Brno.
Results: A total of 1 762 volunteers were examined. Depending on their BMI in the outpatient clinic, we classified 37 (2%) volunteers as underweight, 773 (43.9%) volunteers as normal weight, 629 (35.7%) volunteers as overweight, 310 (17.6) volunteers as obese, and 13 (0.1%) as morbidly obese.
Conclusions: The prevalence of obesity was very high in our study population; 53.4 % of the study population has obesity or overweight. Obesity and fatness (as determined by bioimpedance) increase with age. Men begin with higher percentages of obesity but in women obesity progresses more rapidly with age.



TOBACCO USE AND SOME CHARACTERISTICS OF TOBACCO USERS: PRELIMINARY RESULTS OF KARDIOVIZE 2030

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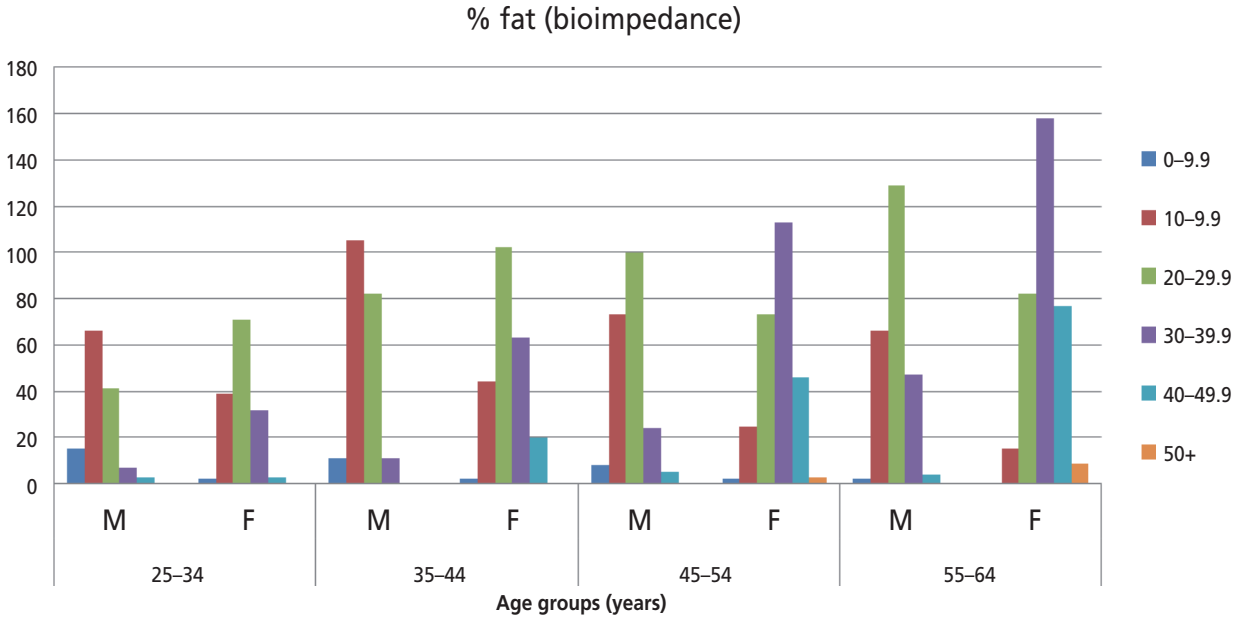
Aim: To assess tobacco use and some characteristics of tobacco users (including electronic cigarette users) relevant to cardiovascular disease in a representative population sample of the city of Brno, Czech Republic.
Methods: A cross-sectional survey of cardiovascular risk factors was conducted using the methodology of the Czech post-MONICA Study in the city of Brno in 2013 (total population of 400 033). This preliminary report of the first 965 randomly selected volunteers (including 512 women) aged 25–64 focuses on tobacco use and expo-



Smoking prevalence in the population of Brno				
	Overall N = 965	Males N = 453	Females N = 512	*p*-value
Parameter	**N (%)**	**N (%)**	**N (%)**	
Smokers	225 (23.3%)	119 (26.3%)	106 (20.7%)	0.047
Non-smokers	497 (51.5%)	205 (45.3%)	292 (57.0%)	< 0.001
Ex-smokers	192 (19.9%)	106 (23.4%)	86 (16.8%)	0.012
Passive smokers	319 (34.0%)	180 (41.1%)	139 (27.9%)	< 0.001
in the restaurant	246 (25.5%)	150 (33.1%)	96 (18.8%)	< 0.001
in their workplace	66 (6.8%)	45 (9.9%)	21 (4.1%)	0.135
in their home	59 (6.1%)	26 (5.7%)	33 (6.4%)	0.131
other places	31 (3.2%)	14 (3.1%)	17 (3.3%)	0.108
Other tobacco products	11 (1.1%)	11 (2.4%)	0	< 0.001
E-cigarette	34 (3.5%)	23 (5.1%)	11 (2.1%)	0.020
Concomitant use of e-cigarettes and tobacco	20 (2.1%)	12 (10.1%)	8 (7.5%)	0.503

sure, their prevalence in different subgroups as well as on the attitudes towards smoke-free policies.
Results: This analysis represents the initial 35.2% of invited volunteers from the two largest health insurance companies and involves 965 individuals with a mean age of 47.3 ± 11.40 years. The prevalence of smoking was 26.7%, with daily tobacco use in 23.3%, less than once daily in 3.4%; 19.9% of the sample were ex-smokers. A total of 34.0% of the survey population reported exposure to passive smoking. Electronic cigarette use was observed in 3.5% of respondents, more commonly in men (5.1%) than in women (2.1%; $p = 0.020$). Concomitant use of electronic cigarettes and smoking was observed in 2.07% of the population.
Conclusion: The prevalence of tobacco use in the productive-age population of Brno City district is 26.70%, still a high figure.

THE INFLUENCE OF ANTHRACYCLINE ANTIBIOTICS ON CARDIOVASCULAR SYSTEM AND RENAL HEMODYNAMICS OF PATIENTS WITH LYMPHOPROLIFERATIVE DISEASE

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Purpose: To assess the influence of doxorubicin therapy on cardiac and renal hemodynamics, renal function, and cardiorenal interactions in patients with lymphoproliferative diseases.
Methods: We examined 40 patients with lymphoproliferative diseases (non-Hodgkin lymphoma, lymphogranulomatous), 23 (57%) women, with a mean age of 50 ± 17.5 years. An examination (echocardiography, Doppler ultrasonography renal arteries examination, glomerular filtration rate [GFR]) was performed before polychemotherapy (PCT), 4–6 weeks after PCT initiation (low doxorubicin cumulative dose [DCD] 75.09 ± 49.1 mg/m^2) and 3 months after PCT initiation (moderate DCD 326.4 ± 159.2 mg/m^2).
Results: Baseline examination documented high renal arterial resistance (RRI) and pulse (RPI) indexes (0.7 ± 0.06 and 1.5 ± 0.26, respectively) with low peak systolic (RPSV) and end-diastolic (REDV) renal arterial velocities (75.5 ± 25.5 and 35.0 ± 8.5 m/s, respectively). There were no significant changes in systolic and diastolic left ventricular (LV) function and renal arteries hemodynamics at low DCD achievement ($p > 0.05$), whereas GFR decreased in women from 107.5 to 52.2 ml/min/1.73 m^2 ($p < 0.001$). Diastolic function worsening was shown at moderate DCD achievement: deceleration time (DT) increased from 214 ± 54.6 to 258 ± 69.6 ms ($p = 0.02$), whereas renal arterial parameters remained unchanged with progressive GFR worsening. Cardiorenal interactions analysis showed a relation between LV diastolic parameters and renal arteries indexes (rIVRT-RPI = 0.46, $p = 0.008$; rIVRT-RRI = 0.37; $p = 0.0$; rDT-PRI=0.55; $p = 0.001$; rDT-RRI = 0.055; $p = 0.001$). There was a negative correlation between GFR and low DCD (r = –0.72; $p = 0.002$), age (r = –0.46; $p = 0.005$), female gender (r = –0.61; $p = 0.0001$), arterial hypertension (r = –0.24; $p = 0.009$), and LV diastolic parameters.