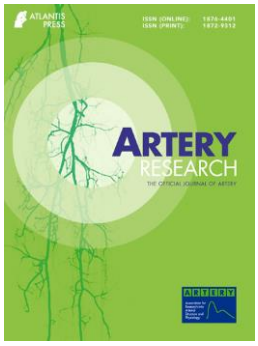

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P6.1: DIURNAL CHANGES IN PULSE PRESSURE AMPLIFICATION IN NORMOTENSIVE, HYPERTENSIVE DIPPER AND HYPERTENSIVE NON-DIPPER PATIENTS

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vs. 26.9±18.4) and contrast volume (ml) (370.8± 170.2 vs. 348.3±156.7) did not differ beetwen women and men (p=NS for all). Overall succes rate was 86.7%, in women 80.9% and in men 87.9% (p=NS).
Conclusion: PCI of CTO remains safe and successful method of revascularization in men and women. However, women were a significant minority. Although women are older, success rate of revascularization and complications were similar compared to men.

P6.1
DIURNAL CHANGES IN PULSE PRESSURE AMPLIFICATION IN NORMOTENSIVE, HYPERTENSIVE DIPPER AND HYPERTENSIVE NON-DIPPER PATIENTS

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Office central blood pressure (cBP) have been shown to better predict cardiovascular events than standard peripheral pressure. With Vasotens software and BPLab monitor (OOO Petr Telegin, Russia) is now possible to estimate central pressure over 24h. However to date, no data have shown that 24h monitoring cBP have added value to office measurements. We looked at diurnal changes in pulse pressure amplification (PPamp=peripheral pulse pressure/ central pulse pressure) cBP and PWV in 120(60M/60F) normotensives (NT), 120(60M/60F) hypertensive dippers (DI) and 120(60M/60F) hypertensive non-dippers(ND) matched for age, sex and day brachial SBP for the hypertensive subjects.
Between day and night, peripheral systolic blood pressure fell from 122±8 to 103±7, from 140±11 to 117±11 and from 140±12 to 137±14mmHg in NT, DI and ND respectively. Heart rate fell from 70±8 to 59±7bpm in NT, from 77±10 to 63±8bpm in DI and from 73±12 to 65±11bpm in ND. Day PPamp was slightly higher in DI than other groups (132±7%, 135±8%, 131±9% in NT, DI and ND respectively, $p<0.001$ ANOVA). Night PPamp was lower but did not vary between groups (123±7%, 124±6% and 123±7%, p=0,11). However PPamp was correlated with HR (R2=0,36). After correction for HR changes, PPamp did not differ during day and night.
Once corrected for HR, diurnal variations of central pressure seems to be in parallel to peripheral blood pressure whatever is the hypertensive or dipping status.

P6.2
AORTIC-TO-BRACHIAL STIFFNESS GRADIENT INDEPENDENTLY PREDICTS KIDNEY FUNCTION: CASE-CONTROL COMPARISON BETWEEN PATIENTS WITH TYPE 2 DIABETES AND NON-DIABETIC CONTROLS

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Background: A negative aortic-brachial stiffness gradient (ab-SG), whereby aortic pulse wave velocity (aPWV)≥brachial PWV (bPWV) predicts mortality independent of aPWV in dialysis patients. Patients with type 2 diabetes mellitus (T2DM) have increased risk of renal damage and exhibit haemodynamic abnormalities that may alter ab-SG. This study aimed to determine if there were differences in ab-SG among patients with T2DM compared with non-diabetic controls, and also to determine associations between ab-SG, aPWV and kidney function.
Methods: 60 patients with T2DM and 60 age- and sex-matched non-diabetic controls (58±8 years, 55% male both) had ab-SG measured by applanation tonometry, with ab-SG defined as the quotient of bPWV (carotid-to-radial) and aPWV (carotid-to-femoral). Kidney function was assessed by estimated glomerular filtration rate (eGFR).
Results: ab-SG was significantly lower in patients with T2DM (0.99±0.2 versus 1.2±0.3, $p<0.001$) and aPWV, but not bPWV, was significantly higher ($p<0.001$, p=0.25). 58% of patients with T2DM versus 27% of non-diabetic controls ($\chi^2=11.0$, $p<0.001$) had negative ab-SG (aPWV≥bPWV). ab-SG predicted eGFR in the entire cohort independent of age, sex, T2DM status and cardiovascular risk factors ($\beta=17.0$, p=0.005), whereas aPWV was a weaker correlate of eGFR ($\beta=-0.15$, p=0.22). Independent predictors of ab-SG were brachial and central pulse pressure ($\beta=-0.008$, p=0.005; $\beta=-0.007$, p=0.027) for patients with T2DM and heart rate ($\beta=-0.012$, p=0.007) and brachial pulse pressure ($\beta=-0.012$, p=0.026) for non-diabetic controls.
Conclusions: Patients with T2DM have reduced (negative) ab-SG. In the entire cohort, ab-SG predicted kidney function independent of aPWV, implying that negative ab-SG may have a pathophysiological function.

P6.3
PLATELET ACTIVITY IN TEEN GIRLS WITH PRIMARY ARTERIAL HYPERTENSION

Indre Bauziene [1,*], Kazys Simanauskas [1], Virginijus Sapoka [1], Vytautas Kasiulevicius [1], Kristina Ryliskiene [1], Reda Matuzeviciene [1], Augustina Jankauskiene [1], Tomas Rekasius [2]
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Keywords: Primary arterial hypertension, platelet activity
Objective: Primary arterial hypertension (PAH) — a multifactorial disease. Its etiology, especially in children, still causes a lot of questions and diagnostic tests are not common in clinical practice. Even less is known of the variation in platelet activity in adolescents with PAH, this study was the assessment of platelet activity in healthy subjects and patients with PAH in groups of 17-18 year old girls.
Materials and methods: Platelet functional activity was determined by flow cytometry. Platelets used to identify the three antibodies: CD42a (GP IX), CD41a (GP IIb) and CD61 (GP IIIa) and assessing the activity of select PAC-1 antibody that binds specifically to activated GPIIb / IIIa complex. Through 2008-2013 years platelet activity was assessed 31 with primary arterial hypertension 17-18 year old girl (case group) and 33 healthy girls (control group). A statistical analysis was done and the significance assessed by a X-square test. The statistical difference was considered significant if the *p* value was below 0.05.
Results: Teen girls with PAH group hasn't statistically significantly more platelets (both percentage and absolute terms) that joined the PAC-1 antibody. We can not say that suffering from PAH girls, have an increased platelet activity.
Conclusions: The girls, who have PAH, functional platelet activity has not differ from healthy. But perhaps it should be more research sample, and it should involve risk factors.

P6.4
PLATELET ACTIVITY IN TEENAGE BOYS WITH PRIMARY ARTERIAL HYPERTENSION

Indre Bauziene [1,*], Kazys Simanauskas [1], Virginijus Sapoka [1], Vytautas Kasiulevicius [1], Reda Matuzeviciene [1], Kristina Ryliskiene [1], Augustina Jankauskiene [1], Tomas Rekasius [2]
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Keywords: primary arterial hypertension, platelet activity
Objective: Primary arterial hypertenion for teen has caused a lot of debate today, there is too much uncertainty about platelet functional changes in patients with PAH. The objective was to evaluate platelet activity in healthy and suffering from PAH groups of 17-18 year old boys.
Materials and methods: Platelet functional activity was determined by flow cytometry. Platelets used to identify the three antibodies: CD42a (GP IX), CD41a (GP IIb) and CD61 (GP IIIa) and assessing the activity of select PAC-1 antibody that binds specifically to activated GPIIb / IIIa complex. Through 2008-2013 years platelet activity was assessed 38 PAH 17-18 year-old boys (case group) and 41 healthy the same age teenager (control group). A statistical analysis was done and the significance assessed by a X-square test. The statistical difference was considered significant if the *p* value was below 0.05.
Results: In PAH group of teen boys were not found statistically significantly more PAC-1 antibody attaghed platelets. Based on the results of this study we could argue that the platelet functional activity of PAH teens is not higher than in healthy adolescents.
Conclusions: PAH teen platelet functional activity does not differ from healthy peers. To obtain accurate results, it should be performed at a higher sample survey.