and adjacent LA wall. We measured the volume of those using computer volume analyzer soft (VINCENT).
In the three groups, there were no significant differences in age, sex, body surface area (BSA) and the prevalence of hypertension. Both the patients without AF and with PAF had similar BNP and echocardiographic features including LAD (39±7.3 mm vs. 38±5.1 mm, N.S), LA volume index (LAVI) (32±8.8 ml/m^2 vs. 34±9.9 ml/m^2, N.S). However, the patients with PeAF had higher BNP (132±72 pg/ml vs. 89±110 pg/ml, P=0.002) and larger LAD (43±6.4 mm vs. 38±5.1 mm, P<0.001) and LAVI (44±14 ml/m^2 vs. 34±9.9 ml/m^2, P=0.008) than the patients with PAF. The average volume of PVs and the average volume of PVs corrected by the BSA (PVs volume/BSA) in PAF group patients significantly increased than those in Without AF group patients. (PVs volume: 22±5.8 ml vs. 16±4.8 ml, P<0.001. PVs volume/BSA: 13.1±3.0 ml/m^2 vs. 9.3±2.4 ml/m^2, P<0.001). There was no significant difference between the patients with PAF group and PeAF group (PVs volume in PeAF group patients: 26±10 ml. PVs volume/BSA in PeAF group patients: 14.8±6.0 ml/m^2).
Conclusion: The enlargement of pulmonary vein develops before left atrial dilatation, therefore it might predicts the presence of atrial fibrillation earlier than left atrial dimension and left atrial volume index.

SYNCOPE

P6627
Assessment of tromboxan B2 serum concentration changes during head-up tilt test in patients with vasovagal syncope

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The role of endothelium in pathomechanism of vasovagal syncope (VVS) is related to pronounced vasodilation and thrombotic activation in response to the orthostatic stress. One of the possible explanations of thrombotic activation during VVS might be endothelial excretion of tromboxanes.
The aim of study was evaluation of Thromboxan B2 (TXB2) serum changes during head-up tilt-test (HUTT) in patients with VVS.
Study population: 25pts (11 men, 14 women) aged 18–42 years (median of age: 21yrs) with VVS referred to HUTT. Cardio- and neurological causes of syncope were previously excluded in all studied pts.
Methods: In all pts HUTT was done according to Westminster protocol with sublingual nitroglycerine (NTG) provocation in case of negative result of passive tilting. During HUTT continuous, noninvasive beat-to-beat monitoring of heart rate and blood pressure was performed using NEXFIN (Bmeye) monitor. Blood samples were taken before the test, after completion of both – passive and active phases (after NTG provocation) and 15 minutes after finishing the test (syncope induction or protocol completion) to evaluate the serum concentration of TXB2. Changes of TXB2 serum concentrations during HUTT were analyzed in relation to the type of vasovagal response during the test.
Results: HUTT was positive in 21 pts (84%) – in 5 pts there was cardioinhibitory response, in 14 pts. – mixed and in 2 - vasodepressive. Serum TXB2 concentration before the test was significantly lower in pts with negative HUTT than in pts with positive HUTT (674,7 vs 1212,3 pg/ml p<0,03). After completion of passive phase of HUTT significant increase of TXB2 concentration was noticed in HUTT-positive pts (3195,5 vs 1212,3 pg/ml; p,0,04), whereas pts with negative HUTT revealed no significant changes. (909,7 vs 674,7 pg/ml). After sublingual NTG administration, increase of TXB2 concentration was observed in HUTT-negative pts (2741,2 vs 909,4 pg/ml, p<0,02), whereas in HUTT-positive pts there was significant decrease (1923,7 vs 3195,5 pg/ml; p<0,02). After the test, TXB2 concentration decreased to value close to the initial in HUTT-negative pts, whereas in syncope-induced pts increase of TXB2 was noticed (2955,1 vs 1923,7 pg/ml; p<0,04). There was no relation between serum TXB2 concentration and type of vasovagal response to the orthostatic stress.
Conclusions: 1. Syncope induction during HUTT was related to significantly higher values of serum Thromboxan B2 concentration after passive phase of HUTT with consecutive reduction of its concentration after NTG provocation in contrast to the HUTT-negative patients.
2. Changes of Thromboxan B2 concentrations seem to be important indicator of impact of endothelium on pathomechanism of vasovagal response to orthostatic stress in patients with vasovagal syncope.
Funding Acknowledgements: Supported by a grant from the Polish National Science Centre, N402 475040

P6628
The head-up tilt test: beyond the diagnosis of vasovagal syncope

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The head-up tilt test (TT)) is a current method to diagnose vasovagal syncope (VVS). It has also been proposed as a method to differentiate between VVS and other conditions, such as epilepsy or unexplained falls. Besides, some TTs are requested in other cases without loss of consciousness to observe whether the symptoms have some hemodynamic component (significant change in blood pressure or heart rhythm).
Objective: To determine the prevalence of anomalous findings during the TT in patients (pts) with suspected but non confirmed syncope (SS) or non-syncopal episodes, and to compare it with pts having a distinct syncope.
Methods: Between 2009 and 2015, 2814 consecutive TTs were carried out. Patients were divided in 3 groups: 1) Syncope pts (Sync, n: 2028, mean age: 45.3 yr); 2) pts with a diagnosis of epilepsy, falls or TIA in whom syncope is suspected (SS, n: 145, mean age: 53.5) and 3) pts without syncope (No Sync: dizziness, instability, vertigo, pre-syncope or others, n: 634, mean age: 49.5). TTs results were classified as follows: 1) Positive (+) or negative (–) TT for VVS, 2) Anomalous findings: a) Symptoms without a hemodynamic correlation (S); b) Hemodynamic alterations without symptoms (H) and c) Symptoms with a hemodynamic correlation (SH). The prevalence of abnormal findings is expressed as a percentage of the total population with TT (–).

Table 1

Indication		TT(+), n (%)	S	H	SH	Total abnormal findings
Syncope	n: 2028	409 (20)	182 (11)	187 (11.5)	51 (3)	420 (30)
SS	n: 145	12 (7.5)**	18 (12)	17 (12)	2 (1.3)	37 (25)
	Epilepsy (n: 59)	7 (12)	9 (17)	2 (4)	0	11 (21)
	Falls (n: 81)	5 (6)**	8 (10.5)	2 (2.6)*	14 (18)***	24 (31)
	TIA (n: 5)	0	0	1	0	1 (20)
No Sync	n: 641	83 (13)***	72 (13)	72 (13)	11 (2)	155 (28)
	Dizziness (n: 285)	36 (13)**	26 (10)	44 (18)*	3 (1.2)	73 (29)
	Pre-syncope (n: 266)	45 (17)	41 (18.5)	16 (7)	6 (2.7)	63 (28)
	Others (n: 90)	3 (3)**	7 (8)	12 (13.7)	2 (2)	21 (24)

Syncope vs. other groups. Chi squared *P<0.05, **<0.005, ***<0.0005.

Conclusions: 1) The prevalence of TT (+) is not significantly different in patients with syncope, pre-syncope or previous diagnosis of epilepsy. In the other groups, it is significantly lower. 2) Prevalence of symptoms with a hemodynamic correlation is larger in patients with unexplained falls. 3) Symptoms without a hemodynamic correlate suggest another causal mechanism. 4) More than a fourth of the population without TT (+) shows anomalous findings during the test. Its diagnostic value has yet to be determined.

P6629
Evaluation of anxiety level in female with syncope and presyncope

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Background: Syncope is defined as a transient loss of consciousness. There is no universally accepted definition of presyncope state. Usually, the term describes a state of being passed out but without actual loss of consciousness or a period of prodromal symptoms of syncope. Presyncope can last from seconds to minutes. Data suggested that syncope and presyncope may be a result of neurocardiogenic reaction due to orthostatic and psychological stimuli. Several studies have demonstrated that anxiety is associated with syncope and presyncope state. Characteristic way of thinking by patients with anxiety contents fear of losing control expressed by the fear of fainting, death and illness.
Purpose: The aim of the study was to assess the state and trait anxiety of women from nonclinical population related to incidences of syncope and presyncope compared to those who denied experiencing such incidences.
Methods: We examined 941 women from Poland nonclinical population, aged 26.9±10.2 (range 18–75, IQR 21–28). The women were divided into 4 groups on the basis of their medical history of presyncope and syncope: group 1 – presyncope without syncope; group 2 - syncope and presyncope, group 3 – syncope without presyncope; group 4 (control group) - without syncope and presyncope. The respondents filled out the survey with basic sociodemographic data, an semistructured interview regarding syncope and presyncope. Furthermore, they completed the Spielberger State and Trait Anxiety Inventory (STAI). The STAI is a self-reported anxiety inventory that contains 20-item scales that measure situational (STAI-S – state) and baseline (STAI -T - trait) anxiety. The higher score, the greater anxiety level expressed by the responder.
Results: The data were analysed by one-way ANOVA. The raw result of STAI as a state and as a trait was statistically significantly higher in group 1 and 2 than in groups 3 and 4. The state and trait anxiety level did not differ significantly between groups 1 and 2 and also between groups 3 and 4. The results were presented in table 1.

Table 1 The state and trait anxiety leve

	Group 1 (N=251)	Group 2 (N=217)	Group 3 (N=32)	Group 4 (N=441)
STAI-S	36.7±10.1*#	37.1±10.3*##	32.1±9.6	34.7±10.1
STAI-T	43.0±8.8*##	43.2±8.6*##	39.2±8.5	40.8±8.5

Abbreviations: N: number of patients in analysed groups. *p<0.02 vs Group 3, #p<0.02 vs Group 4, ##p<0.005 vs Group 4.

Conclusion: Higher state and trait anxiety seems to be related to the reported of presyncopal events. Thus, anxiety might be considered in the management patients relating presyncope.