should be aware that the likelihood of misestimating BP control is high in some hypertensive subjects.

P16.12 LEFT VENTRICULAR HYPERTROPHY IN PATIENTS WITH METABOLIC SYNDROME

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Objectives: New IDF definition is essential to be aware in order to recognize and treat the metabolic syndrome(MS) more effectively. The aim of this study was to compare the existence of MS according to IDF and ATPIII definition and evaluate left ventricular hypertrophy(LVH) prevalence at pts with MS

Methods: 119pts (mean age 53.3±1.1yrs, mean body mass index(BMI) 33.0±0.7 g/m^2), 69 female (F) and 50 male (M) was composed 3 groups according to waist circumference(WC): F 1gr. – WC<80, 2gr. – 80 < WC<88, 3gr. – WC>88; M 1gr. – WC<94, 2gr. – 94<WC<102, 3gr. – WC>102(cm). All pts. have fast glucose, insulin, HOMA index, lipid profile dimension, echocardiography for LVH evaluation with use two LVM indexation: LVMI1=LVM/body surface area(BSA) and LVMI2 = LVM/height$^{2.7}$. LVH was diagnosed when LVMI1>110g/m^2(F), >125g/m^2 (M); LVMI2 >47g/m^2,7(F), >50 g/m^2,7(M).

Results: At 1 groups was estimated all normal mean dates, whereas in 2 groups was higher glucose levels: 6.2±0.6(mmol/L); triglycerides(TG): 1.85±0.3(mmol/L); HOMA: 3.9±1.0(M); lower HDLCh: 1.21± 0.06 (mmol/L)(F). LVH using LVMI1–115.1±7.7(F), 135.7±9.3(M) (g/m^2), and LVMI2–56.0±4.2 (F), 64.3±4.6 (M)(g/m^2,7). All mean dates in 3 groups was higher than normal. MS was diagnosed according ATPIII criteria, in 75% F and 50% M, IDF – in 83% F and 64% M. Among all pts LVH was estimated using LVMI1 in 71%, LVMI2-in 87%. In 2 groups concentric LVH (CLVH) was represented in 19%, eccentric LVH(ELVH)-in 57%; in 3 groups CLVH-in 28%, ELVH-in 64%. There were correlations between glucose and LVM(r = 0.41), LVMI1 (r = 0.46); LVMI2 (r = 0.40); WC and LVM(r = 0.46), LVMI2 (r = 0.39) (all p < 0.00001); TG and LVMI2 (r = 0.25); HDLCh and LVM (r = −0.25), LVMI1 (r = −0.21) (all p <0.01).

Conclusions: The use of IDF MS definitions has been shown higher MS prevalence (on 8% at F and 14% at M) as the use of ATPIII recommendation. Not only by IDF recommended MS cluster, but although another CVD risk factors, such as LVH, dyslipidemia, insulin resistance are present in 2 groups of pts, who were included as suspicious to have MS according to IDF definitions. Using LVM indexation to height$^{2.7}$ we have the higher (16%) LVH prevalence in comparative with LVMI=LVM/BSA.

P16.13 VALIDATION OF THE OMRON HEM-4011C-E DEVICE FOR BLOOD PRESSURE MEASUREMENT ACCORDING TO THE INTERNATIONAL VALIDATION PROTOCOL

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Objective: The aim of this study was to perform a clinical validation of the Omron HEM-4011C-E blood pressure (BP) measuring device according to the International validation Protocol.

Design and Methods: The International validation Protocol is divided into 2 phases: the 1st phase is performed on 15 subjects fulfilling the inclusion criteria requested by the protocol; the 2nd phase is performed on additional 18 subjects, only if the device passes 1st phase. The inclusion criteria require to select subjects according to BP ranges. For each subject, 4 BP measurements were performed simultaneously by 2 observers (trained according to the French Hypertension Society criteria) using standard mercury sphygmomanometers alternately with 3 Omron measurements. The difference (Δ) between the BP value given by the device and that obtained by the 2 observers (mean of the 2 observers) was calculated for each measure. The 99 differences (Δ) were classified into categories (⩽5, ⩽10, ⩽15 mmHg). The number of Δ (n) in each category was compared to the number required by the International Protocol. An individual analysis was then done to determine for each subject the number of comparisons ⩽5 mmHg. At least 22 of the 33 subjects should have 2 of their 3 comparisons ⩽5 mmHg.

Results: The mean age of the 33 included subjects (21 men, 12 women) was 58±13 years. The Omron HEM-4011C-E fulfilled the required criteria of 1st phase (15 subjects) of the International Protocol. Regarding the 33 subjects, the difference between the 2 observers was 0.95±1.4 mmHg and 0.08±0.84 mmHg for systolic and diastolic BP respectively. Results of the comparison of the device-observers are shown in the table.

	⩽5 mmHg	⩽10 mmHg	⩽15 mmHg	2/3 ⩽5 mmHg	Device (m±sd)	Observers (m±sd)	Δ (mmHg)
SBP	n = 83	n = 97	n = 99	n = 29	136.5±20.9	137.9±22.1	−1.4±5.5
DBP	n = 80	n = 93	n = 98	n = 27	89.6±16.4	90±16	−0.4±4.8

Conclusion: The Omron HEM-4011C-E device fulfils the recommendations of the international validation protocol.

P16.14 VALIDATION OF THE OMRON HEM-7000-E DEVICE FOR BLOOD PRESSURE MEASUREMENT ACCORDING TO THE INTERNATIONAL VALIDATION PROTOCOL

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Objective: The aim of this study was to perform a clinical validation of the Omron HEM-7000-E blood pressure (BP) measuring device according to the International validation Protocol.

Design and Methods: The International validation Protocol is divided into 2 phases: the first phase is performed on 15 subjects fulfilling the inclusion criteria requested by the protocol; the second phase is performed on additional 18 subjects, only if the device passes the first phase. The inclusion criteria require to select subjects according to BP ranges. For each subject, 4 BP measurements were performed simultaneously by 2 observers (trained according to the French Hypertension Society criteria) using standard mercury sphygmomanometers alternately with 3 Omron measurements. The difference (Δ) between the BP value given by the device and that obtained by the 2 observers (mean of the 2 observers) was calculated for each measure. The 99 differences (Δ) were classified into categories (⩽5, ⩽10, ⩽15 mmHg). The number of Δ (n) in each category was compared to the number required by the International Protocol. An individual analysis was then done to determine for each subject the number of comparisons ⩽5 mmHg. At least 22 of the 33 subjects should have 2 of their 3 comparisons ⩽5 mmHg.

Results: The mean age of the 33 included subjects (19 men, 14 women) was 52±15 years. The Omron HEM-7000-E device fulfilled the required criteria of the primary phase (15 subjects) of the International Protocol. Regarding the 33 subjects, the difference between the 2 observers was 0.36±1.88 mmHg and 0.34±1.14 mmHg for systolic and diastolic BP respectively. Results of the comparison device-observers are shown in the table.

	⩽5 mmHg	⩽10 mmHg	⩽15 mmHg	2/3 ⩽5 mmHg	Device (m±sd)	Observers (m±sd)	Δ (mmHg)
SBP	n = 67	n = 81	n = 90	n = 25	133.8±24.2	135.9±22.7	−2.13±7.37
DBP	n = 73	n = 93	n = 99	n = 25	85.2±13.9	85.2±13.8	0.09±4.91

Conclusion: The Omron HEM-7000-E device fulfils the recommendations of the international validation protocol.

P16.15 VALIDATION OF THE SPENGLER KP-7500D DEVICE FOR BLOOD PRESSURE MEASUREMENT ACCORDING TO THE INTERNATIONAL VALIDATION PROTOCOL

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Objective: The aim of this study was to perform a clinical validation of the Spengler KP-7500D blood pressure (BP) measuring device according to the International validation Protocol.

Design and Methods: The International validation Protocol is divided into 2 phases: the first phase is performed on 15 subjects fulfilling the inclusion criteria requested by the protocol; the second phase is performed on additional 18 subjects, only if the device passes the first phase. The inclusion criteria require to select subjects according to BP ranges. For each subject, 4 BP measurements were performed simultaneously by 2 observers (trained according to the French Hypertension Society criteria) using standard mercury sphygmomanometers alternately with 3 Spengler measurements. The difference (Δ) between the BP value given by the device and that obtained by the 2 observers (mean of the 2 observers) was calculated for each measure. The 99 differences (Δ) were classified into categories (⩽5, ⩽10, ⩽15 mmHg). The number of Δ (n) in each category was compared to the number required by the International Protocol. An individual analysis was then done to determine for each subject the number of comparisons ⩽5 mmHg. At least 22 of the 33 subjects should have 2 of their 3 comparisons ⩽5 mmHg.