



Artery Research

ISSN (Online): 1876-4401

ISSN (Print): 1872-9312

Journal Home Page: <https://www.atlantis-press.com/journals/artres>

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To cite this article: T.K. Soender, L.M. Van Bortel, J. Lambrechtsen, J. Hangaard, J. Moeller, K. Egstrup (2011) P6.13: IMPACT OF CALIBRATION ON ESTIMATES OF CENTRAL BLOOD PRESSURE, Artery Research 5:4, 175–175, DOI: <https://doi.org/10.1016/j.artres.2011.10.098>

To link to this article: <https://doi.org/10.1016/j.artres.2011.10.098>

Published online: 14 December 2019

Parameter	P value	Odds ratio
PWV	0.024	1.329
Use of BAB	0.560	0.671
Use of ACE-I	0.186	0.428
Use of CCB	0.027	4.131
Use of nitrates	0.570	1.555
Use of statins	0.854	0.857

Conclusions. Increased aortic PWV correlates significantly with the presence of significant CAS and may be important integrative marker for CAD.

P6.13
IMPACT OF CALIBRATION ON ESTIMATES OF CENTRAL BLOOD PRESSURE

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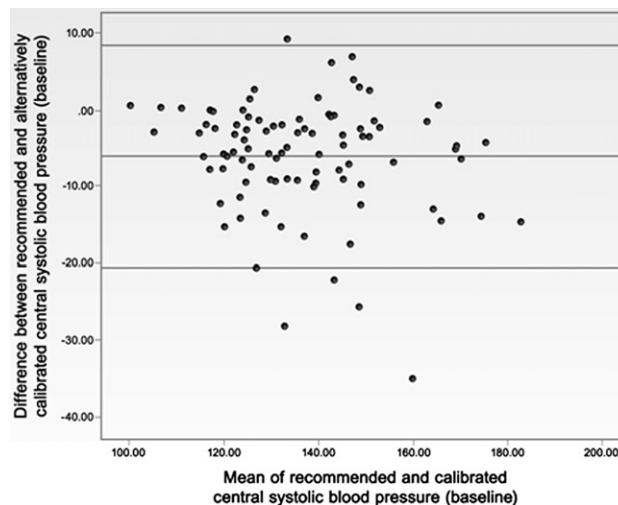
⁵Department of Cardiology, University Hospital of Copenhagen, Rigshospitalet, Copenhagen, Denmark Objective: To examine effects of calibration on estimates of central blood pressure (CBP)

Methods: We included 122 patients with type-II-diabetes and hypertension. They were characterized as having controlled (CH), uncontrolled (UH) or resistant (RH) hypertension based on ambulatory blood pressure measurement and number of antihypertensive agents. CBP was estimated using Sphygmocor. We calibrated the radial pressure wave as recommended by the manufacturer using brachial systolic (BSBP) and diastolic (BDBP) BP and used the generalized transfer function for estimation of the aortic pressure waveform. Afterwards we recalibrated the radial pressure wave using BDBP and mean arterial pressure (BMAP). Data were analyzed offline in customized software.

Results: Estimates of CSBP were significantly correlated ($R^2=0.83$, $P<0.0001$ at baseline and $R^2=0.71$, $P<0.0001$ after six months). As shown in figures 1 and 2 CSBP was 6.1 mmHg to 6.6 mmHg lower when calibrated with BSBP and BDBP and variation of difference ranged from 14.6 mmHg to 22 mmHg.

Differences between BSBP and CSBP lost significance in patients with RH after six months when alternatively calibrated with BDBP and BMAP as did reduction in CSBP.

Conclusion: Although we found good correlation between estimates of CBP using either calibration, variation of difference was high suggesting that the



difference between the 2 calibration methods is more than a systematic error. And our results show that it could be important to take into account measures used for calibration when interpreting clinical effect on non-invasive estimates of CBP.

P6.14
WHICH ESTIMATE OF MEAN ARTERIAL PRESSURE IS TO BE USED FOR ADJUSTMENT FOR PULSE WAVE VELOCITY?

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⁵Department of Cardiology, University Hospital of Copenhagen, Rigshospitalet, Copenhagen, Denmark Objective: To examine correlation of different estimates of mean arterial pressure (MAP) to pulse wave velocity (PWV) and their effect on statistical adjustment

Methods: Patients with hypertension and type-II-DM were included. They were characterized as having controlled (CH), uncontrolled (UH) or resistant hypertension (RH). Patients with UH and RH received intensified antihypertensive treatment for six months.

We measured clinic BP using Omron HEM 757, ABPM rmed using Kivex TM 2430 and Spacelab 90217 devices and PWV using Sphygmocor.

Results: We included 108 patients.

MAP measured immediately before measurement of PWV correlated to PWV ($R^2=0.1$, $P=0.001$ at baseline and $R^2=0.16$, $P<0.0001$ after six months) whereas ABPM MAP did not ($R^2=0.01$, $P=0.31$ at baseline and $R^2=0.01$, $P=0.25$ after six months).

PWV was significantly higher in patients with RH than in patients with CH ($P=0.001$) but we found no significant reduction in PWV after six months ($P=0.16$). Reduction in PWV in patients with UH was significant ($P=0.02$). PWV remained significantly higher in patients with RH ($P=0.05$) as did reduction in PWV in patients with UH ($P=0.05$) when including ABPM MAP in the statistical model. However when including clinic MAP, PWV was no longer significantly higher in patients with RH ($P=0.08$) and reduction in PWV in patients with UH lost significance ($P=0.33$).

Conclusion: Clinic MAP correlates best with PWV and using clinic MAP for statistical adjustment produces different results from using ABPM MAP. As PWV has a diurnal variation, MAP taken at the same time as PWV is likely the better to correct for.

