
PRINCIPALES BIBLIOGRAPHIES

INTERNATIONALES

" VITESSE de l'ONDE de POULS"

1/ <http://eurheartj.oxfordjournals.org/content/31/19/2338>

Determinants of pulse wave velocity in healthy people and in the presence of cardiovascular risk factors: 'establishing normal and reference values'

Conclusion

The present study is the first to establish reference and normal values for PWV, combining a sizeable European population after standardizing results for different methods of PWV measurement.

2/ <https://www.ncbi.nlm.nih.gov/pubmed/20620420>

The contribution of the Framingham Heart Study to the prevention of cardiovascular disease: a global perspective.

The Framingham Heart Study has been a trailblazer in the field of cardiovascular epidemiology. The wealth of novel scientific data that it has generated over 5 decades has made a significant

contribution to cardiovascular disease (CVD) prevention in the United States and indirectly influenced global CVD prevention strategies.

The Framingham Study has provided insights into the prevalence, incidence, prognosis, predisposing factors, and determinants of CVD. The now well-established risk factor concept, fundamental to prevention of CVD, originated from the Framingham study. It generated seminal findings such as the effects of tobacco use, unhealthy diet, physical inactivity, obesity, raised blood cholesterol, raised blood pressure, and diabetes on CVD. When these findings were first published, these were novel cardiovascular risk factors, now they are the major focus for global and national prevention efforts for reducing the burden of CVD and other major noncommunicable diseases. The Framingham Heart Study has also been in the forefront of the development of cardiovascular risk prediction equations for assessment of absolute risk. Further developments in this area including the development of World Health Organization/International Society of Hypertension risk prediction charts have resulted in a paradigm shift in CVD prevention strategies, from a single risk factor focus to a more cost-effective total cardiovascular risk approach, an approach recommended by the World Health Organization for CVD prevention worldwide.

3/ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2948201/>

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4/ <https://www.ncbi.nlm.nih.gov/pubmed/11742883>

Aortic pulse wave velocity predicts cardiovascular mortality in subjects >70 years of age.

Aortic pulse wave velocity (PWV) is a significant and independent predictor of cardiovascular mortality in subjects with essential hypertension and in patients with end-stage renal disease. Its contribution to cardiovascular risk in subjects 70 to 100 years old has never been tested. A cohort of 141 subjects (mean \pm -SD age, 87.1 \pm -6.6 years) was studied in 3 geriatrics departments in a Paris suburb. Together with sphygmomanometric blood pressure measurements, aortic PWV was measured with a validated automatic device. During the 30-month follow-up, 56 patients died (27 from cardiovascular events). Logistic regressions indicated that age ($P=0.005$) and a loss of autonomy ($P=0.01$) were the best predictors of overall mortality. For cardiovascular mortality, aortic PWV was the major risk predictor ($P=0.016$). The odds ratio was 1.19 (95% confidence interval, 1.03 to 1.37). Antihypertensive drug treatment and blood pressure, including systolic and pulse pressure, had no additive role. In subjects 70 to 100 years old, aortic PWV is a strong, independent predictor of cardiovascular death, whereas systolic or pulse pressure was not. This prospective result will need to be confirmed in an intervention trial.

5/ <https://www.ncbi.nlm.nih.gov/pubmed/27088638>

Estimated carotid-femoral pulse wave velocity has similar predictive value as measured carotid-femoral pulse wave velocity.

Conclusion :

Epwv predicted major cardiovascular events independently of SCORE, FRS and cfPWV indicating that these traditional risk scores have underestimated the complicated impact of age and blood pressure on arterial stiffness and cardiovascular risk.

6/ <https://www.ncbi.nlm.nih.gov/pubmed/27754051>

OS 14-08 ESTIMATED CAROTID-FEMORAL PULSE WAVE VELOCITY HAS SIMILAR PREDICTIVE VALUE AS MEASURED CAROTID-FEMORAL PULSE WAVE VELOCITY.

Conclusion:

Epwv predicted major CV events independently of SCORE, FRS and cfPWV indicating that these traditional risk scores have underestimated the complicated impact of age and blood pressure on arterial stiffness and CV risk.

7/ <https://www.ncbi.nlm.nih.gov/pubmed/27753924>

OS 04-08 THE RELATIONSHIP BETWEEN CHILDHOOD RISK FACTORS AND LONG-TERM ARTERIAL STIFFNESS - A 26-YEAR FOLLOW-UP STUDY.

Conclusion :

Higher SBP in children and adolescents, family history of hypertension and male gender may increase the risk of developing long-term arterial stiffness.

8/ <https://www.ncbi.nlm.nih.gov/pubmed/27621605>

The predictive value of arterial stiffness on major adverse cardiovascular events in individuals with mildly impaired renal function.

Conclusion :

Arterial stiffness is a moderate and independent predictive factor for MACEs in individuals with mildly impaired renal function (Egfr <90 ml/min/1.73 m²).

9/ <https://www.ncbi.nlm.nih.gov/pubmed/16461839>

Prognostic value of aortic pulse wave velocity as index of arterial stiffness in the general population.

Conclusion :

In a general Danish population, APWV predicted a composite of cardiovascular outcomes above and beyond traditional cardiovascular risk factors, including 24-hour MAP.

10/ <https://www.ncbi.nlm.nih.gov/pubmed/19264052>

Pulse wave velocity for assessment of arterial stiffness among people with spinal cord injury: a pilot study.

Conclusion :

Aortic PWV was higher among the SCI group compared with the non-SCI group. The higher mean aortic PWV values among the SCI group compared with the non-SCI group indicated a higher risk of CAD among people with SCI in the absence of metabolic syndrome.

11/ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4609308/>

Novel Methods for Pulse Wave Velocity Measurement

Conclusion :

With the development of new techniques that is become simpler, less expensive and more efficient, it is expected that the measurement of arterial stiffness will become an important part of clinical routine.

CONCLUSIONS BIBLIOGRAPHIQUES

La Vitesse de l'Onde de Pouls , paramètre validé depuis longtemps pour son acuité corrélative avec de nombreuses pathologies cardiovasculaires, a été délaissée en raison de ses difficultés d'exploitation en pratique médicale clinique courante.

Ce paramètre de grande valeur appréciative de l'état présent et prédictif d'un patient a été rendu infiniment plus accessible à la pratique clinique de par l'utilisation de nouvelles technologies tant au niveau des capteurs qu'au niveau de l'exploitation informatique des données recueillies et enfin par l'ergonomie des nouveaux appareillages.

Les multiples bibliographies internationales démontrent la valeur de la mesure de la Vitesse de l'Onde de Pouls dans sa prévalence et ses valeurs pronostiques et prédictives de nombreuses pathologies cardiovasculaires.

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