

Important Publications

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Guidelines

Reappraisal of European guidelines on hypertension management - a European Society of Hypertension Task Force document

Giuseppe Mancia, Stéphane Laurent, Enrico Agabiti-Rosei, Ettore Ambrosioni, Michel Burnier, Mark J. Caulfield, Renata Cifkova, Denis Clément, Antonio Coca, Anna Dominiczak, Serap Erdine, Robert Fagard, Csaba Farsang, Guido Grassi, Hermann Haller, Anthony Heagerty, Sverre E. Kjeldsen, Wolfgang Kiowski, Jean Michel Mallion, Athanasios Manolis, Krzysztof Narkiewicz, Peter Nilsson, Michael H. Olsen, Karl Heinz Rahn, Josep Redon, José Rodicio, Luis Ruilope, Roland E. Schmieder, Harry A.J. Struijker-Boudier, Pieter A. van Zwieten, Margus Viigimaa and Alberto Zanchetti
Journal of Hypertension 2009, 27:2121–2158

2007 Guidelines for the Management of Arterial Hypertension

Giuseppe Mancia et al.
EHJ (2007) 28, 1462-1536

Arterielle Gefäßsteifigkeit und Pulswellenanalyse Positionspapier zu Grundlagen, Methodik, Beeinflussbarkeit und Ergebnisinterpretation

Gast-Herausgeber: Dr. Johannes Baulmann
Deutsche Medizinische Wochenschrift 2010, S1 5 3

Recommendations for measuring arterial stiffness

Clinical Applications of Arterial Stiffness, Task Force III Recommendations for User Procedures

Luc M. Van Bortel, Daniel Duprez, Mirian J. Starmans-Kool, Michel E. Safar, Christina Giannattasio, John Cockcroft, Daniel R. Kaiser, and Christian Thuillez
Am J Hypertens 2002;15:445–452

Expert consensus document on arterial stiffness-methodological issues and clinical applications

Stéphane Laurent, John Cockcroft, Luc Van Bortel, Pierre Boutouyrie, Cristina Giannattasio, Daniel Hayoz, Bruno Pannier, Charalambos Vlachopoulos, Ian Wilkinson, and Harry Struijker-Boudier
European Heart Journal (2006) 27, 2588–2605

Abridged version of the expert consensus document on arterial stiffness

Stéphane Laurent, John Cockcroft, Luc Van Bortel, Pierre Boutouyrie, Cristina Giannattasio, Daniel Hayoz, Bruno Pannier, Charalambos Vlachopoulos, Ian Wilkinson, Harry Struijker-Boudier
Artery Research (2007) 1, 2-12

Arterial stiffness

Arterial Stiffness and the Development of Hypertension - The ARIC Study

Duanping Liao, Donna K. Arnett, Herman A. Tyroler, Ward A. Riley, Lloyd E. Chambless, Moyses Szklo, Gerardo Heiss
Hypertension. 1999;34:201-206.

Mechanisms, Pathophysiology, and Therapy of Arterial Stiffness

Susan J. Ziemann, Vojtech Melenovsky, David A. Kass
Arterioscler Thromb Vasc Biol. 2005;25:932-943.

Relation of arterial stiffness to diastolic dysfunction in hypertensive heart disease

P M Mottram, B A Haluska, R Leano, S Carlier, C Case, T H Marwick
Heart 2005;91:1551–1556.

Arterial stiffness: reflections on the arterial pulse

Michael F. O'Rourke and Stanley S. Franklin
European Heart Journal (2006) 27, 2497–2498

Aortic stiffness as a predictor of coronary atherosclerosis

Cristina Giannattasio
Journal of Hypertension 2006, 24:2347–2348

Is arterial stiffness ready for daily clinical practice?

Luc M. Van Bortel
Journal of Hypertension 2006, 24:281–283

Arterial Elasticity in Cardiovascular Disease: Focus on Hypertension, Metabolic Syndrome and Diabetes

Relu Cernes, Reuven Zimlichman, Marina Shargorodsky
Cardiovascular Diabetology: Clinical, Metabolic and Inflammatory Facets. Adv Cardiol.
Basel, Karger

Arterial Stiffness, Cognitive Decline, and Risk of Dementia - The Rotterdam Study

Marielle M.F. Poels; Marieke van Oijen, MD; Francesco U.S. Mattace-Raso, MD, PhD; Albert Hofman, MD, PhD; Peter J. Koudstaal, MD, PhD; Jacqueline C.M. Witteman, PhD; Monique M.B. Breteler, MD, PhD
Stroke. 2007;38:888-892.

Vascular Stiffness: Its Measurement and Significance for Epidemiologic and Outcome Studies

Stephanie S. DeLoach and Raymond R. Townsend
Clin J Am Soc Nephrol 3: 184–192, 2008.

Arterial stiffness, cardiovagal baroreflex sensitivity and postural blood pressure changes in older adults: The Rotterdam Study

Francesco U.S. Mattace-Raso, Anton H. van den Meiracker, Willem Jan Bos, Tischa J.M. van der Cammen, Berend E. Westerhof, Suzette Elias-Smale, Robert S. Reneman, Arnold P.G. Hoeks, Albert Hofmana and Jacqueline C.M. Witteman
Journal of Hypertension 2007, 25:1421–1426

Increased Stroke Volume and Aortic Stiffness Contribute to Isolated Systolic Hypertension in Young Adults

Carmel M. McEniery, Yasmin, Sharon Wallace, Kaisa Maki-Petaja, Barry McDonnell, James E. Sharman, Christopher Retallick, Stanley S. Franklin, Morris J. Brown, R. Catherine Lloyd, John R. Cockcroft, Ian B. Wilkinson; on behalf of the ENIGMA Study Investigators
Hypertension. 2005;46:221-226.

Fibrinogen, genes, and arterial stiffness

Veronique Regnault, Patrick Lacolley. and Michel E. Safar
Journal of Hypertension 2009, 27:1350–1351

Impaired Fasting Glucose Is Associated with Increased Arterial Stiffness in Elderly People without Diabetes Mellitus: The Rotterdam Study

Nicole M. van Popele, A. Elizabeth Hak, Francesco U. S. Mattace-Raso, Michiel L. Bots, Deirdre A.M. van der Kuip, Robert S. Reneman, Arnold P. G. Hoeks, Albert Hofman, Diederick E. Grobbee and Jacqueline C. M. Witteman
J Am Geriatr Soc 54:397–404, 2006.

Methods and Devices for Measuring Arterial Compliance in Humans (2002)

Bruno M. Pannier, Alberto P. Avolio, Arnold Hoeks, Giuseppe Mancia, and Kenji Takazawa
AJH 2002; 15:743–753

Arterial function

Age-Related Reduction of NO Availability and Oxidative Stress in Humans

Stefano Taddei, Agostino Virdis, Lorenzo Ghiadoni, Guido Salvetti, Giampaolo Bernini, Armando Magagna and Antonio Salvetti
Hypertension 2001;38;274-279

The ageing endothelium, cardiovascular risk and disease in man

Daniele Versari, Elena Daghini, Agostino Virdis, Lorenzo Ghiadoni and Stefano Taddei
Exp Physiol 94.3 pp 317–321

Endothelial Dysfunction - A Marker of Atherosclerotic Risk

Piero O. Bonetti, Lilach O. Lerman, Amir Lerman
Arterioscler Thromb Vasc Biol. 2003;23:168-175.

Endothelial Dysfunction – The Link Between Inflammation and Atherosclerosis in Rheumatoid Arthritis

Paul Bacon, Leigh Church, Stephen Young
J Indian Rheumatol Assoc 2005;13:130-106

Endothelium-dependent contractions and endothelial dysfunction in human hypertension

Daniele Versari, Elena Daghini, Agostino Virdis, Lorenzo Ghiadoni and Stefano Taddei
British Journal of Pharmacology (2009) 157, 527–536

Pulse-Wave Analysis - Clinical Evaluation of a Noninvasive, Widely Applicable Method for Assessing Endothelial Function

Ian B. Wilkinson, Ian R. Hall, Helen MacCallum, Isla S. Mackenzie, Carmel M. McEniery, Bart J. van der Arend, Yae-Eun Shu, Laura S. MacKay, David J. Webb, John R. Cockcroft
Arterioscler Thromb Vasc Biol. 2002;22:147-152.

Arterial function and inflammation

Inflammation and Atherosclerosis

Peter Libby, Paul M. Ridker and Attilio Maseri
Circulation 2002;105;1135-1143

Acute Systemic Inflammation Increases Arterial Stiffness and Decreases Wave Reflections in Healthy Individuals

Charalambos Vlachopoulos, Ioanna Dima, Konstantinos Aznaouridis, Carmen Vasiliadou, Nikolaos Ioakeimidis, Constadina Aggeli, Marina Toutouza and Christodoulos Stefanadis
Circulation 2005;112;2193-2200;

Role of Inflammation in Atherosclerosis

Luigi Giusto Spagnoli, Elena Bonanno, Giuseppe Sangiorgi, and Alessandro Mauriello
J Nucl Med 2007; 48:1800–1815

Inflammation in Atherosclerosis and Implications for Therapy

Rodolfo Paoletti, Antonio M. Gotto, Jr and David P. Hajjar
Circulation 2004;109;III-20-III-26

Expanded Network of Inflammatory Markers of Atherogenesis: Where Are We Now?

Seyed Hesameddin Abbasi and Mohammad Ali Boroumand
The Open Cardiovascular Medicine Journal, 2010, 4, 38-44

Inflammation, Thrombosis and Vascular Biology: Translating Ideas into Cardiovascular Research and Therapy

Armen Yuri Gasparyan

The Open Cardiovascular Medicine Journal, 2010, Volume 4

Inflammation-Induced Atherosclerosis as a Target for Prevention of Cardiovascular Diseases from Early Life

Roya Kelishadi

The Open Cardiovascular Medicine Journal, 2010, 4, 24-29

Inflammation in Atherosclerosis: From Vascular Biology to Biomarker Discovery and Risk Prediction

René R. S. Packard and Peter Libby

Clinical Chemistry 54:1 24–38 (2008)

Risk factors in coronary atherosclerosis athero-inflammation: the meeting point

Raul Altman

Thrombosis Journal 2003, 1

Arterial function evaluation and endothel function**Endothelium-dependent contractions and endothelial dysfunction in human hypertension**

Daniele Versari, Elena Daghini, Agostino Viridis, Lorenzo Ghiadoni and Stefano Taddei

British Journal of Pharmacology (2009), 157, 527–536

The ageing endothelium, cardiovascular risk and disease in man

Daniele Versari, Elena Daghini, Agostino Viridis, Lorenzo Ghiadoni and Stefano Taddei

Exp Physiol 2009, 94.3 pp 317–321

Age-Related Reduction of NO Availability and Oxidative Stress in Humans

Stefano Taddei, Agostino Viridis, Lorenzo Ghiadoni, Guido Salvetti, Giampaolo Bernini, Armando Magagna and Antonio Salvetti

Hypertension 2001;38;274-279

Endothelial Dysfunction as a Target for Prevention of Cardiovascular Disease

Daniele Versari, Elena Daghini, Agostino Viridis, Lorenzo Ghiadoni and Stefano Taddei

Diabetes Care, November 2009 vol. 32 no. suppl 2 S314-S321**Pulse-Wave Analysis - Clinical Evaluation of a Noninvasive, Widely Applicable Method for Assessing Endothelial Function**

Ian B. Wilkinson, Ian R. Hall, Helen MacCallum, Isla S. Mackenzie, Carmel M. McEniery, Bart J. van der Arend, Yae-Eun Shu, Laura S. MacKay, David J. Webb, John R. Cockcroft

Arterioscler Thromb Vasc Biol. 2002;22:147-152.

Arteriosclerosis**Techniques for the Detection of Coronary Atherosclerosis - Multi-detector Row CT Coronary Angiography**

Thomas J. Vogl, MD, Nasreddin D. Abolmaali, MD, Thomas Diebold, MD, Kerstin Engelmann, Mehtap Ay, Selami Dogan, MD, Gerhardt Wimmer-Greinecker, MD, Anton Moritz, MD, Christopher Herzog, MD

Radiology 2002; 223:212–220

Association Between Arterial Stiffness and Atherosclerosis The Rotterdam Study

Nicole M. van Popele, MD, PhD; Diederick E. Grobbee, MD, PhD; Michiel L. Bots, MD, PhD; Roland Asmar, MD, PhD; Jirar Topouchian, MD, PhD; Robert S. Reneman, MD, PhD; Arnold P.G. Hoeks, PhD; Deidre A.M. van der Kuip, MD, PhD; Albert Hofman, MD, PhD; Jacqueline C.M. Witteman, PhD
Stroke. 2001;32:454-460.

Aortic stiffness is associated with atherosclerosis of the coronary arteries in older adults - the Rotterdam Study

Nicole M. van Popele, Francesco U.S. Mattace-Raso, Rozemarijn Vliegenthart, Diederick E. Grobbee, Roland Asmar, Deirdre A.M. van der Kuip, Albert Hofman, Pim J. de Feijter, Matthijs Oudkerk and Jacqueline C.M. Witteman
J Hypertens 24:2371–2376

The association of arterial stiffness and arterial calcification - the Rotterdam Study

AE Odink, FUS Mattace-Raso, A van der Lugt, A Hofman, MGM Hunink, MMB Breteler, GP Krestin2 and JCM Witteman
Journal of Human Hypertension (2008), 1–3

Arteriosclerosis and Atherosclerosis - Guilty by Association

Ian B. Wilkinson, Carmel M. McEniery, John R. Cockcroft
Hypertension. 2009;54:1213-1215.

Arterial age**Vascular Aging-A Tale of EVA and ADAM in Cardiovascular Risk Assessment and Prevention**

Peter M. Nilsson, Pierre Boutouyrie and Stéphane Laurent
Hypertension 2009;54;3-10

Normal Vascular Aging: Differential Effects on Wave Reflection and Aortic Pulse Wave Velocity The Anglo-Cardiff Collaborative Trial (ACCT)

Carmel M. McEniery, PHD, Yasmin, PHD, Ian R. Hall, MB, MRCP, Ahmad Qasem, PHD, Ian B. Wilkinson, MA, DM, MRCP, John R. Cockcroft, BSC, MB, FRCP
J Am Coll Cardiol 2005;46:1753– 60

Age-Related Reduction of NO Availability and Oxidative Stress in Humans

Stefano Taddei, Agostino Virdis, Lorenzo Ghiadoni, Guido Salvetti, Giampaolo Bernini, Armando Magagna and Antonio Salvetti
Hypertension 2001;38;274-279

Changes in Arterial Stiffness and Wave Reflection With Advancing Age in Healthy Men and Women**The Framingham Heart Study**

Gary F. Mitchell, Helen Parise, Emelia J. Benjamin, Martin G. Larson, Michelle J. Keyes, Joseph A. Vita, Ramachandran S. Vasan, Daniel Levy
Hypertension. 2004;43:1239-1245.

Aging and Arterial Stiffness

Hae-Young Lee, MD, PhD; Byung-Hee Oh, MD, PhD
Circulation Journal Vol.74, November 2010

Age and Blood Pressure Levels Modify the Functional Properties of Central but Not Peripheral Arteries

Astrid G. Ruitenbeek, Tischa J.M. van der Cammen, Anton H. van den Meiracker and Francesco U.S. Mattace-Raso
Angiology 2008; 59; 290

**Renal Function and Risk of Myocardial Infarction in an Elderly Population
The Rotterdam Study**

Jasper J. Brugts, MSc; Annemarieke M. Knetsch, MD; Francesco U. S. Mattace-Raso, MD, PhD;
Albert Hofman, MD, PhD; Jacqueline C. M. Witteman, PhD
Arch Intern Med. 2005;165:2659-2665

**Large-Artery Stiffness Contributes to the Greater Prevalence of Systolic Hypertension in
Elderly Women**

Karen L. Berry, BSc(Hons), James D. Cameron, MD, MEngSc, Anthony M. Dart, BA, BM, BCh, DPhil,
FRCP, Elizabeth M. Dewar, BSc, Christoph D. Gatzka, MD, Garry L. Jennings, MD, FRACP, Yu-Lu
Liang, MD, PhD, Chris M. Reid, PhD, and Bronwyn A. Kingwell, PhD
J Am Geriatr Soc 52:368–373, 2004.

Pulse Wave velocity

**Prognostic Value of Aortic Pulse Wave Velocity as Index of Arterial Stiffness in the General
Population**

Tine Willum Hansen; Jan A. Staessen; Christian Torp-Pedersen; Susanne Rasmussen; Lutgarde
Thijs; Hans Ibsen; Jørgen Jeppesen
Circulation. 2006;113:664-670.

Arterial Stiffness and Risk of Coronary Heart Disease and Stroke - The Rotterdam Study

Francesco U.S. Mattace-Raso; Tischa J.M. van der Cammen; Albert Hofman; Nicole M. van Popele;
Michiel L. Bos; Maarten A.D.H. Schalekamp; Roland Asmar; Robert S. Reneman; Arnold P.G. Hoeks;
Monique M.B. Breteler; Jacqueline C.M. Witteman
Circulation. 2006;113:657-663.

Aortic Pulse Wave Velocity as a Marker of Cardiovascular Risk in Hypertensive Patients

Jacques Blacher, Roland Asmar, Saliha Djane, Gérard M. London, Michel E. Safar
Hypertension. 1999;33:1111-1117.

**Aortic Stiffness Is an Independent Predictor of All-Cause and Cardiovascular Mortality in
Hypertensive Patients**

Stéphane Laurent, Pierre Boutouyrie, Roland Asmar, Isabelle Gautier, Brigitte Laloux, Louis Guize,
Pierre Ducimetiere, Athanase Benetos
Hypertension. 2001;37:1236-1241.

Aortic Pulse Wave Velocity, an Independent Marker of Cardiovascular Risk

H. Safar, J.-J. Mourad, M. Safar and J. Blacher
Arch Mal Coeur 2002 ; 95 : 1215-8.

**Aortic Pulse Wave Velocity Is Associated With the Presence and Quantity of Coronary Artery
Calcium - A Community-Based Study**

Iftikhar J. Kullo, Lawrence F. Bielak, Stephen T. Turner, Patrick F. Sheedy II, Patricia A. Peyser
Hypertension. 2006;47:174-179.

Arterial stiffness and cardiovascular risk factors in a population-based study

Jacques Amar, Jean Bernard Ruidavets, Bernard Chamontin, Ludovic Drouet and Jean Ferrieres
Journal of Hypertension 2001, 19:381-387

Arterial stiffening and vascular calcifications in end-stage renal diseases

Alan Guérin et al.
Nephrol Dial Transplant (2000) 15: 1014-1021.

Impact of Aortic Stiffness on Survival in End-Stage Renal Disease

Jacques Blacher, MD; Alain P. Guerin, MD; Bruno Pannier, MD; Sylvain J. Marchais, MD; Michel E. Safar, MD; Gérard M. London, MD
Circulation. 1999;99:2434-2439.

Impact of Aortic Stiffness Attenuation on Survival of Patients in End-Stage Renal Failure

Alain P. Guerin, MD; Jacques Blacher, MD, PhD; Bruno Pannier, MD; Sylvain J. Marchais, MD; Michel E. Safar, MD; Gérard M. London, MD
Circulation. 2001;103:987-992.

Stiffness of Capacitive and Conduit Arteries, Prognostic Significance for End-Stage Renal Disease Patient

Bruno Pannier, Alain P. Guérin, Sylvain J. Marchais, Michel E. Safar, Gérard M. London
Hypertension. 2005;45:592-596.

Left ventricular Ejection Duration and Pulse Wave Velocity in JENS2003

Jens Nürnberger, Anabelle Opazo Saez, Sandra Dammer, Anna Mitchell, Rene R. Wenzel, Thomas Philipp and Rafael F. Schäfers
Journal of Hypertension 2003, 21:2125–2132

Vascular Stiffness: Its Measurement and Significance for Epidemiologic and Outcome Studies

Stephanie S. DeLoach and Raymond R. Townsend
Clin J Am Soc Nephrol 3: 184–192, 2008

Augmentation index, pulse wave reflection**Augmentation index is associated with cardiovascular risk**

Jens Nürnberger, Ayten Keflioglu-Scheiber, Anabelle M. Opazo Saez, Rene R. Wenzel, Thomas Philipp and Rafael F. Schäfers
Journal of Hypertension 2002, 20:2407–2414

Arterial Stiffness, Wave Reflections, and the Risk of Coronary Artery Disease

Thomas Weber, MD; Johann Auer, MD; Michael F. O'Rourke, MD; Erich Kvas, ScD; Elisabeth Lassnig, MD; Robert Berent, MD; Bernd Eber, MD
Circulation. 2004;109:184-189.

Reflection in the Arterial System and the Risk of Coronary Heart Disease

Tomoshige Hayashi, Yasunori Nakayama, Kei Tsumura, Kiyomichi Yoshimaru, and Hiroyasu Ueda
AJH 2002; 15:405–409

Diminished Wave Reflection in the Aorta

Jukka Westerbacka, Ian Wilkinson, John Cockcroft, Tapio Utriainen, Satu Vehkavaara, Hannele Yki-Järvinen
Hypertension. 1999;33:1118-1122.

Aortic Pressure Augmentation Predicts Adverse Cardiovascular Events in Patients With Established Coronary Artery Disease

Julio A. Chirinos, Juan P. Zambrano, Simon Chakko, Anila Veerani, Alan Schob, Howard J. Willens, Guido Perez, Armando J. Mendez
Hypertension. 2005;45:980-985.

Increased arterial wave reflections predict severe cardiovascular events in patients undergoing percutaneous coronary interventions

Thomas Weber, Johann Auer, Michael F. O'Rourke, Erich Kvas, Elisabeth Lassnig, Gudrun Lamm, Nina Stark, Martin Rammer, and Bernd Eber
European Heart Journal (2005) 26, 2657–2663

Central pressure and pulse wave amplification**Differential Impact of Blood Pressure–Lowering Drugs on Central Aortic Pressure and Clinical Outcomes - Principal Results of the CAFE Study**

The CAFE Investigators, for the Anglo-Scandinavian Cardiac Outcomes Trial (ASCOT) Investigators; CAFE Steering Committee and Writing Committee; Bryan Williams, MD, FRCP; Peter S. Lacy, PhD; Simon M. Thom, MD, FRCP; Kennedy Cruickshank, MD; Alice Stanton, MB, PhD, FRCPI; David Collier, MBBS, PhD; Alun D. Hughes, MBBS, PhD; H. Thurston, MD, FRCP; Study Advisor Michael O'Rourke, MD, FRACP
Circulation. 2006;113:1213-1225.

Central Pressure More Strongly Relates to Vascular Disease and Outcome Than Does Brachial Pressure - The Strong Heart Study

Mary J. Roman, Richard B. Devereux, Jorge R. Kizer, Elisa T. Lee, James M. Galloway, Tauqeer Ali, Jason G. Umans, Barbara V. Howard
Hypertension. 2007;50:197-203.

High Central Pulse Pressure Is Independently Associated With Adverse Cardiovascular Outcome - The Strong Heart Study

Mary J. Roman, MD, Richard B. Devereux, MD, Jorge R. Kizer, MD, MSC, Peter M. Okin, MD, Elisa T. Lee, PHD, Wenyu Wang, PHD, Jason G. Umans, MD, PHD, Darren Calhoun, PHD, Barbara V. Howard, PHD
JACC Vol. 54, No. 18, 2009

Central Aortic Blood Pressure and Cardiovascular Risk - A Paradigm Shift

Alberto Avolio
Hypertension. 2008;51:000-000.

Central Pulse Pressure and Mortality in End-Stage Renal Disease

Michel E. Safar, Jacques Blacher, Bruno Pannier, Alain P. Guerin, Sylvain J. Marchais, Pierre-Marie Guyonvarc'h, Gérard M. London
Hypertension. 2002;39:735-738.

Central But Not Brachial Blood Pressure Predicts Cardiovascular Events in an Unselected Geriatric Population - The ICARe Dicomano Study

Riccardo Pini, MD, FACC, M. Chiara Cavallini, MD, Vittorio Palmieri, MD, PHD, Nicolò Marchionni, MD, Mauro Di Bari, MD, PHD, Richard B. Devereux, MD, FACC, Giulio Masotti, MD, Mary J. Roman, MD, FACC
JACC Vol. 51, No. 25, 2008

The influence of heart rate on augmentation index and central arterial pressure in humans

Ian B. Wilkinson, Helen MacCallum, Laura Flint, John R. Cockcroft, David E. Newby and David J. Webb
Journal of Physiology (2000), 525.1, pp. 263—270

Central Blood Pressure Measurements and Antihypertensive Therapy - A Consensus Document

Enrico Agabiti-Rosei, Giuseppe Mancia, Michael F. O'Rourke, Mary J. Roman, Michel E. Safar, Harold Smulyan, Ji-Guang Wang, Ian B. Wilkinson, Bryan Williams, Charalambos Vlachopoulos

Hypertension. 2007;50:154-160.

Central Pressure - Variability and Impact of Cardiovascular Risk Factors - The Anglo-Cardiff Collaborative Trial II

Carmel M. McEniery, Yasmin, Barry McDonnell, Margaret Munnery, Sharon M. Wallace, Chloe V. Rowe, John R. Cockcroft, Ian B. Wilkinson,
Hypertension. 2008;51:1476-1482.

Central Arterial Pressure and Arterial Pressure Pulse - New Views Entering the Second Century After Korotkov

MICHAEL F. O'ROURKE, MD, AND JAMES B. SEWARD, MD
Mayo Clin Proc. 2006;81(8):1057-1068

Role of Pulse Pressure Amplification in Arterial Hypertension - Experts' Opinion and Review of the Data

Alberto P. Avolio, Luc M. Van Bortel, Pierre Boutouyrie, John R. Cockcroft, Carmel M. McEniery, Athanase D. Protogerou, Mary J. Roman, Michel E. Safar, Patrick Segers, Harold Smulyan
Hypertension. 2009;54:375-383.

Central blood pressure as estimate of cardiovascular risk - potentials and limitations

Guido Grassi and Claudio Borghi
Journal of Hypertension 2008, 26:16–17

Pulse Pressure Amplification - A Mechanical Biomarker of Cardiovascular Risk

Athanase Benetos, MD, Frédérique Thomas, MD, Laure Joly, MD, Jacques Blacher, MD, PHD, Bruno Pannier, MD, Carlos Labat, PHD, Paolo Salvi, MD, PHD, Harold Smulyan, MD, Michel E. Safar, MD
JACC Vol. 55, No. 10, 2010

What to Anticipate From Pulse Pressure Amplification

Theodore G. Papaioannou, PHD, Athanase D. Protogerou, MD, Christodoulos Stefanadis, MD
JACC Vol. 55, No. 10, 2010

Clinical studies

A comparative study of arterial stiffness, flow-mediated vasodilation of the brachial artery, and the thickness of the carotid artery intima-media in patients with systemic autoimmune diseases

Pál Soltész, Henriett Dér, György Kerekes, Péter Szodoray, Gabriella Szücs, Katalin Dankó, Yehuda Shoenfeld, Gyula Szegedi, Zoltán Szekanecz
Clinical Rheumatology 2009 Feb 18

A comparative study of arterial stiffness, flow-mediated vasodilation of the brachial artery, and the thickness of the carotid artery intima-media in patients with systemic autoimmune diseases

Jonatan Vukovic a, Darko Moduna, Danijela Budimira, Davorka Sutlovic b, Ilza Salamunicc, Ivan Zaja a, Mladen Bobana,*
Volume 207, Issue 1, Pages 255-260 (November 2009)

Immunological features of primary anti-phospholipid syndrome in connection with endothelial dysfunction

P. Soltész, H. Der, K. Veres, R. Laczik, S. Sipka, G. Szegedi and P. Szodoray
Rheumatology 2008;47:1628–1634

Increased Arterial Stiffness as the Marker of Vascular Involvement in Systemic Sclerosis

Orsolya Timár, Pál Soltész, Szilvia Szamosi, Henrietta Dér, sándor Szántó, Zoltán szekanecz,

Gabriella Szűcs
J Rheumatol 2008;35:1329–33

Markers of increased vascular risk in women with hypertension and type 2 diabetes mellitus

Adriana Albu, Daniela Fodor, Cosmina Bondor, Milena Man
Proceedings of the International Conference on RISK MANAGEMENT, ASSESSMENT and MITIGATION

Arterial Stiffness in Chronic Renal Failure and After Renal Transplantation

L. Lócsey, B. Szlanka, B. Borbás, L. Szabó, A. Dán, L. Asztalos, R. Fedor, I. Ménes, and I. Lőrincz
Transplantation Proceedings, 42, 2299–2303 (2010)

Nephrology

Central Pulse Pressure and Mortality in End-Stage Renal Disease

Michel E. Safar, Jacques Blacher, Bruno Pannier, Alain P. Guerin, Sylvain J. Marchais, Pierre-Marie Guyonvarc'h, Gérard M. London
Hypertension. 2002;39:735-738.)

Arterial stiffening and vascular calcifications in end-stage renal disease

Alain P. Guérin, Gérard M. London, Sylvain J. Marchais and Fabien Metivier
Nephrol Dial Transplant (2000) 15: 1014-1021

Arterial Stiffness in Patients with Non-Diabetic Chronic Kidney Disease

Nami Matsuda et al.
J Atheroscler Thromb, 2009; 16:57-62.

Comparison of markers of oxidative stress, inflammation and arterial stiffness between incident hemodialysis and peritoneal dialysis patients - an observational study

Robert G Fassett, Ritza Driver, Helen Healy, Dwarakanathan Ranganathan, Sharad Ratanjee, Iain K Robertson, Dominic P Geraghty, James E Sharman and Jeff S Coombes
BMC Nephrology 2009, 10:8

Pregnancy

Maternal arterial stiffness in pregnancies affected by preeclampsia

Christina Kaihura, Makrina D. Savvidou, James M. Anderson, Carmel M. McEniery, and Kypros H. Nicolaidis¹
Am J Physiol Heart Circ Physiol 297: H759–H764, 2009.

Maternal Wave Reflections and Arterial Stiffness in Normal Pregnancy as Assessed by Applanation Tonometry

Maria L. Macedo, Daniele Luminoso, Makrina D. Savvidou, Carmel M. McEniery, Kypros H. Nicolaidis
Hypertension. 2008;51:1047-1051.

Influence of the Menstrual Cycle, Pregnancy, and Preeclampsia on Arterial Stiffness

Amy O. Robb, Nicholas L. Mills, Jehangir N. Din, Imogen B.J. Smith, Finny Paterson, David E. Newby, Fiona C. Denison
Hypertension. 2009;53:952-958.

Pulse Wave Analysis in Normal Pregnancy - A Prospective Longitudinal Study

Asma Khalil, Eric Jauniaux, Derek Cooper, Kevin Harrington
PLoS ONE 4(7): 6134.

First-trimester markers for the prediction of pre-eclampsia in women with a-priori high risk

A. Khalil, N. J. Cowans, K. Spencer, S. Goichman, H. Meiri, K. Harrington
 Ultrasound Obstet Gynecol 2010; 35: 671–679

Menopausa**Hormone replacement therapy improves arterial stiffness in normotensive postmenopausal women**

Sayaka Miura, Eiichi Tanaka, Akiko Mori, Mayumi Toya, Kazuhiro Takahashi, Kenji Nakahara,
 Masahide Ohmichi, Hirohisa Kurachi
 S. Miura et al. / Maturitas 45 (2003) 293/298

Arterial stiffness is not improved in long-term use of estrogen

Kenny A. Rodriguez-Macias, MD, Tord Naessen, MD, PhDa Annika Boström, MD, and David
 Bergqvist, MD, PhD
 Am J Obstet Gynecol 2002;186:189-94.

Arterial stiffness in postmenopausal women - determinants of pulse wave velocity

Corinne E.I. Lebrun, Yvonne T. van der Schouw, Annette A.A. Bak, Frank H. de Jong, Huibert A.P.
 Pols, Diederick E. Grobbee,
 Steven W.J. Lamberts and Michiel L. Bots
 J Hypertens 20:2165–2172

Stroke**Aortic Stiffness Is an Independent Predictor of Fatal Stroke in Essential Hypertension**

Stéphane Laurent, Sandrine Katsahian, Céline Fassot, Anne-Isabelle Tropeano, Isabelle Gautier,
 Brigitte Laloux and Pierre Boutouyrie
 Stroke 2003;34;1203-1206;

Guidelines for Prevention of Stroke in Patients With Ischemic Stroke or Transient Ischemic Attack: A Statement for Healthcare Professionals From the American Heart Association/American Stroke Association Council on Stroke

Ralph L. Sacco, Robert Adams, Greg Albers, Mark J. Alberts, Oscar Benavente, Karen Furie, Larry B.
 Goldstein, Philip Gorelick, Jonathan Halperin, Robert Harbaugh, S. Claiborne Johnston, Irene Katzan,
 Margaret Kelly-Hayes, Edgar J. Kenton, Michael Marks, Lee H. Schwamm and Thomas Tomsick
 Stroke 2006;37;577-617

Primary Prevention of Ischemic Stroke: A Guideline From the American Heart Association/American Stroke Association Stroke Council

Larry B. Goldstein, Robert Adams, Mark J. Alberts, Lawrence J. Appel, Lawrence M. Brass, Cheryl D.
 Bushnell, Antonio Culebras, Thomas J. DeGraba, Philip B. Gorelick, John R. Guyton, Robert G. Hart,
 George Howard, Margaret Kelly-Hayes, J.V. (Ian) Nixon and Ralph L. Sacco
 Stroke 2006;37;1583-1633;

Update to the AHA/ASA Recommendations for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack

Robert J. Adams, Greg Albers, Mark J. Alberts, Oscar Benavente, Karen Furie, Larry B. Goldstein,
 Philip Gorelick, Jonathan Halperin, Robert Harbaugh, S. Claiborne Johnston, Irene Katzan, Margaret
 Kelly-Hayes, Edgar J. Kenton, Michael Marks, Ralph L. Sacco and Lee H. Schwamm
 Stroke 2008;39;1647-1652;

Therapy and drugs

Comparison of the Effects of Antihypertensive Agents on Central Blood Pressure and Arterial Stiffness in Isolated Systolic Hypertension

Isla S. Mackenzie, Carmel M. McEniery, Zahid Dhakam, Morris J. Brown, John R. Cockcroft, Ian B. Wilkinson
Hypertension. 2009;54:409-413.

Beta-blockers for hypertension: Are they going out of style?

QI CHE, MD, PhD, MARTIN J. SCHREIBER, JR, MD, MOHAMMED A. RAFEY, MD, MS
CLEVELAND CLINIC JOURNAL OF MEDICINE VOLUME 76 • NUMBER 9 S
E P T E M B E R 2 0 0 9

Arterial stiffness and central hemodynamics in treated hypertensive subjects according to brachial blood pressure classification

Michel E. Safar, Jacques Blacher, Athanase Protogerou and
Apostolos Achimastos
Journal of Hypertension 2008, 26:130–137

A comparison of atenolol and nebivolol in isolated systolic hypertension

Zahid Dhakam, Yasmin, Carmel M. McEniery, Tim Burton, Morris J. Brown and Ian B. Wilkinson
Journal of Hypertension 2008, 26:351–356

Central Blood Pressure Measurements and Antihypertensive Therapy - A Consensus Document

Enrico Agabiti-Rosei, Giuseppe Mancia, Michael F. O'Rourke, Mary J. Roman, Michel E. Safar, Harold Smulyan, Ji-Guang Wang, Ian B. Wilkinson, Bryan Williams, Charalambos Vlachopoulos
Hypertension. 2007;50:154-160.

Reducing arterial stiffness and wave reflection - Quest for the Holy Grail?

Azra Mahmud
Artery Research (2007) 1, 13-19

Long-Term Effectiveness of Extended-Release Nitrate for the Treatment of Systolic Hypertension

Gordon S. Stokes, Alexandra J Bune, Natasha Huon, Edward S. Barin
Hypertension. 2005;45:380-384.

Effect of Different Antihypertensive Drug Classes on Central Aortic Pressure

Trefor Morgan, Jann Lauri, Denise Bertram, and Adrienne Anderson
AJH 2004; 17:118–123

Effect of Amlodipine, Quinapril, and Losartan on Pulse Wave Velocity and Plasma Collagen Markers in Patients With Mild-to-Moderate Arterial Hypertension

Marek Rajzer, Marek Klocek, and Kalina Kawecka-Jaszcz
AJH 2003; 16:439–444

Long-Term Effects of Intensive Blood Pressure Lowering on Arterial Wall Stiffness in Hypertensive Patients

Atsuhiko Ichihara, Matsuhiko Hayashi, Yukako Koura, Yuko Tada, Nobuhisa Hirota, and Takao Saruta
AJH 2003; 16:959–965

Effects of Isosorbide Mononitrate and All Inhibition on Pulse Wave Reflection in Hypertension

Gordon S. Stokes, Edward S. Barin, Kerry L. Gilfillan
Hypertension. 2003;41:297-301.

Clinical Applications of Arterial Stiffness:

Therapeutics and Pharmacology

Stéphane Laurent, Bronwyn Kingwell, Alan Bank, Michael Weber, and Harry Struijker-Boudier
AJH 2002; 15:453–458

Assessment of arterial stiffness in clinical practice

I.S. Mackenzie, I.B. Wilkinson and J.R. Cockcroft
Q J Med 2002; 95:67–74

Vasoactive Drugs Influence Aortic Augmentation Index Independently of Pulse-Wave Velocity in Healthy Men

R.P. Kelly, S.C. Millasseau, J.M. Ritter, P.J. Chowienczyk
Hypertension. 2001;37:1429-1433.