Clinical Implications ........................................................... 521

Clinical–Pathological Conference

Chronic Deep Brain Stimulation Decreases Blood Pressure and Sympathetic Nerve Activity in a Drug- and Device-Resistant Hypertensive Patient

Case of Primary Aldosteronism With Discordant Hormonal and Computed Tomographic Findings
Laurence Amar, Yehonatan Sharabi, Gian Paolo Rossi, Emmanuelle Vidal-Petiot, Anna F. Dominiczak, Paolo Mulatero, Anne-Laure Faucou, Neeraj Dhaun, Rhian M. Touyz, Mohammed Barigou, Aurelien Lorthioir .................................................. 529

Hypertension and Its Complications in a Young Man With Autoimmune Disease
Eve Miller-Hodges, Anna F. Dominiczak, Garry L.R. Jennings, Suzanne Oparil, Daniel C. Battle, Fernando Eltovich, Jan N. Basile, Cheryl L. Laffer, Anna Oliveras, Neeraj Dhaun .......................................................... 536

• Online Data Supplement

Brief Review

Arterial Hypertension, Atrial Fibrillation, and Hyperaldosteronism: The Triple Trouble
Teresa M. Seccia, Brasilina Caroccia, Gail K. Adler, Giuseppe Maiolino, Maurizio Cesari, Gian Paolo Rossi .................................................. 545

• Online Data Supplement

Mid-Career Award for Research Excellence

Small Vessels, Big Role: Renal Microcirculation and Progression of Renal Injury
Alejandro R. Chade ........................................................... 551

Lewis K. Dahl Memorial Lecture

Unraveling the Physiology of (Pro)Renin Receptor in the Distal Nephron
Tianxin Yang ........................................................... 564

Editorial Commentaries

Deciphering Systolic–Diastolic Coupling in the Intact Heart
Julio A. Chirinos ........................................................... 575

Angiogenic Markers in Transition: Thinking Positive
Henning Hagmann, Ravi I. Thadhani ...................................... 578

Potential for miRNAs as Biomarkers and Therapeutic Targets in Preeclampsia
Liliya M. Yamaleyeva, Sarah H. Lindsey ................................ 580

Hypertension (ISSN 0194-911X) is published monthly by Wolters Kluwer Health, Inc. at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742. Business offices are located at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103. Production offices are located at 351 West Camden Street, Baltimore, MD 21201-2436. Individuals may subscribe for their personal use at the following rates for print subscriptions: $225 for AHA/ASA Domestic and International Members (excluding General Membership level), or $582 for domestic non-members and $750 for international non-members. AHA membership information can be found online at professional.heart.org. Periodicals postage paid at Hagerstown, MD, and additional mailing offices. POSTMASTER: Send address changes to HYPERTENSION, American Heart Association, Wolters Kluwer Health, Inc., PO Box 1610, Hagerstown, MD 21740.
Resistant Hypertension: A Refractory Disease or Refractory Patient
Hillel Sternlicht, George L. Bakris ................................................................. 582

Blood Pressure Variability Predicts Clinical Outcomes: Now What?
Jeff Whittle .................................................................................................... 584

Simplified Thresholds for Pediatric (Pre)hypertension: One Approach to Improve Recognition and Outcome
Karel Allegaert, Elena Levchenko ................................................................ 587

Offspring Cardiovascular Disease in Preeclampsia: Nature Versus Nurture?
Alice M. Wang, S. Ananth Karumanchi ....................................................... 589

Original Articles

Epidemiology/Population
Hypertension in Pregnancy and Offspring Cardiovascular Risk in Young Adulthood: Prospective and Sibling Studies in the HUNT Study (Nord-Trøndelag Health Study) in Norway
Ingvild V. Alsnæs, Lars J. Vatten, Abigail Fraser, Johan Håkon Bjørgaard, Janet Rich-Edwards, Pål R. Romundstad, Bjørn O. Åsvold ........................................................................................................... 591

Focused Commentary, p 589
Outcome-Driven Thresholds for Increased Home Blood Pressure Variability

Focused Commentary, p 584 • Online Data Supplement
Adiposity and Blood Pressure in 110000 Mexican Adults

Focused Commentary, p 588

Focused Commentary, p 584 • Online Data Supplement
Heart
ZNF307 (Zinc Finger Protein 307) Acts as a Negative Regulator of Pressure Overload–Induced Cardiac Hypertrophy
Chang-Jiang Yu, Chen Liang, Yu-Xia Li, Qing-Qing Hu, Wei-Wan Zheng, Na Niu, Xu Yang, Zi-Rui Wang, Xiao-Di Yu, Bao-Long Zhang, Bin-Lin Song, Zhi-Ren Zhang ........................................................................................................... 615

Focused Commentary, p 589

Focused Commentary, p 575 • Online Data Supplement
Overexpression of Sarcoendoplasmic Reticulum Calcium ATPase 2a Promotes Cardiac Sympathetic Neurotransmission via Abnormal Endoplasmic Reticulum and Mitochondria Ca2+ Regulation
Julia Shanks, Neil Herring, Erin Johnson, Kun Liu, Dan Li, David J. Paterson ........................................................................................................... 625

Focused Commentary, p 575

Focused Commentary, p 589
Reduced First-Phase Ejection Fraction and Sustained Myocardial Wall Stress in Hypertensive Patients With Diastolic Dysfunction: A Manifestation of Impaired Shortening Deactivation That Links Systolic to Diastolic Dysfunction and Preserves Systolic Ejection Fraction
Haotian Gu, Ye Li, Henry Fok, John Simpson, Jonathan C. Kentish, Ajay M. Shah, Philip J. Chowienczyk ........................................................................................................... 633

Focused Commentary, p 575 • Online Data Supplement

Kidney
Activation of Peroxisome Proliferator Activator Receptor β/δ Improves Endothelial Dysfunction and Protects Kidney in Murine Lupus
Miguel Romero, Marta Toral, Íñaki Robles-Vera, Manuel Sánchez, Rosario Jiménez, Francisco O’Valle, Alba Rodríguez-Nogales, Francisco Pérez-Viccaíno, Julio Galvés, Juan Duarte ........................................................................................................... 641

Focused Commentary, p 575 • Online Data Supplement
High Ambulatory Arterial Stiffness Index Is an Independent Risk Factor for Rapid Age-Related Glomerular Filtration Rate Decline in the General Middle-Aged Population
Bjørn Odvar Eriksen, Vidar Tor Nyborg Stefansson, Trond Geir Jenssen, Ulla Dorte Mathisen, Jørgen Schei, Marit Dahl Solbu, Tom Wilsgaard, Toralf Melsom

Skin and Sodium Homeostasis
High-Salt Diet Causes Osmotic Gradients and Hyperosmolality in Skin Without Affecting Interstitial Fluid and Lymph
Elham Nikpey, Tine V. Karlsen, Natalia Rakova, Jens M. Titze, Olav Tenstad, Helge Wiig

Renal Denervation
Maternal Gestational Hypertension-Induced Sensitization of Angiotensin II Hypertension Is Reversed by Renal Denervation or Angiotensin-Converting Enzyme Inhibition in Rat Offspring
Baojian Xue, Haifeng Yin, Fang Guo, Terry G. Beltz, Robert L. Thunhorst, Alan Kim Johnson

Orthostatic Hypotension
Relations of Arterial Stiffness With Postural Change in Mean Arterial Pressure in Middle-Aged Adults: The Framingham Heart Study

Blood Pressure in Children
Can Pediatric Hypertension Criteria Be Simplified?: A Prediction Analysis of Subclinical Cardiovascular Outcomes From the Bogalusa Heart Study
Bo Xi, Tao Zhang, Shengxu Li, Emily Harville, Lydia Bazzano, Jiang He, Wei Chen

Pregnancy and Hypertension
External Validation of the fullPIERS Model for Predicting Adverse Maternal Outcomes in Pregnancy Hypertension in Low- and Middle-Income Countries
U. Vivian Ukah, Beth Payne, Tang Lee, Laura A. Magee, Peter von Dadelszen; for the fullPIERS and miniPIERS Working Groups
Aging
Arterial Pressure, Heart Rate, and Cerebral Hemodynamics Across the Adult Life Span
Chang-Yang Xing, Takashi Tarumi, Rutger L. Meijers, Marcel Turner, Justin Repshas, Li Xiong, Kan Ding, Wanpen Vongpatanasin, Li-Jun Yuan, Rong Zhang

Preeclampsia
Testosterone Represses Estrogen Signaling by Upregulating miR-22: A Mechanism for Imbalanced Steroid Hormone Production in Preeclampsia
Xuan Shao, Yanlei Liu, Ming Liu, Yongqing Wang, Liying Yan, Hao Wang, Liyang Ma, Yu-xia Li, Yangyu Zhao, Yan-ling Wang

Prediction of Preeclampsia Using the Soluble fms-Like Tyrosine Kinase 1 to Placental Growth Factor Ratio: A Prospective Cohort Study of Unselected Nulliparous Women
Ulla Sovio, Francesca Gaccioli, Emma Cook, Martin Hund, D. Stephen Carchoch-Jones, Gordon C.S. Smith

Role of Office Blood Pressure in Diagnosis and Treatment of Hypertension
Genomics and Precision Medicine for Clinicians and Scientists in Hypertension
Anna Dominiczak, Christian Delles, Sandosh Padmanabhan

★ = Published online only.