



EUROPEAN
SOCIETY OF
CARDIOLOGY®

European Heart Journal

Volume 38 No. 2 January 2017

ISSUE @ A GLANCE

 **Hypertension: detection, mechanisms, outcomes, and treatment**
T.F. Lüscher 67

CardioPulse

Sharing clinical trial data: desirable but achievable?
F. Van de Werf 70

Air pollution and traffic noise effect on blood pressure
A. Tofield 71

Clinical career and research: are they mutually exclusive?
T. Gori and J. Grünewald 72

The 20 most-cited articles in echocardiography literature
F. Khosa 74

EAPC country of the month initiative: Denmark
A. Marni Joensen 78

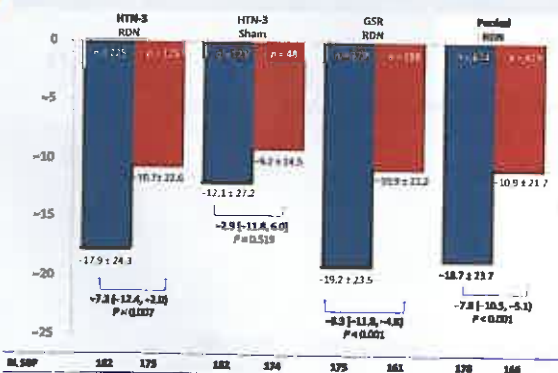
Cardiology Update 2017
R. Amstein 80

REVIEW

Basic science for the clinician
Biomechanical stress in coronary atherosclerosis: emerging insights from computational modelling
V. Thondapu, C.V. Bourantas, N. Foin, I.-K. Jang, P.W. Serruys, and P. Barlis 81

CLINICAL RESEARCH

Interventional cardiology



Reduced blood pressure-lowering effect of catheter-based renal denervation in patients with isolated systolic hypertension: data from SYMPLICITY HTN-3 and the Global SYMPLICITY Registry
F. Mahfoud, G. Bakris, D.L. Bhatt, M. Ester, S. Ewen, M. Fahy, D. Kandzari, K. Kario, G. Mancina, M. Weber, and M. Böhm 93

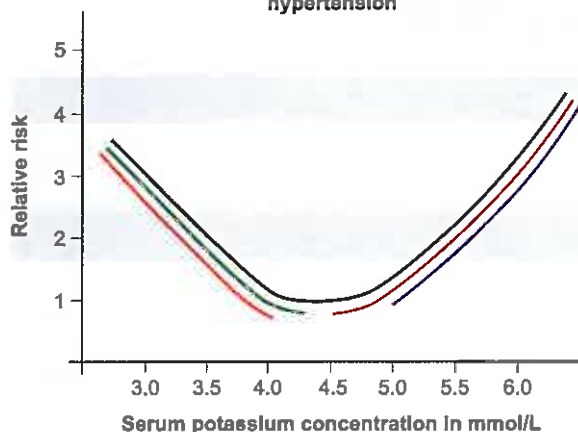
Editorial

Renal denervation: a blunt weapon against isolated systolic hypertension?
R.M. Bruno and S. Taddei 101

Hypertension

Short-term mortality risk of serum potassium levels in hypertension: a retrospective analysis of nationwide registry data
M.L. Krogager, C. Torp-Pedersen, R.N. Mortensen, L. Køber, G. Gislason, P. Søgaard, and K. Aasbjerg 104

Potential approach to prevent and treat hypo- and hyperkalemia in patients with hypertension



The association between serum potassium and mortality in patients with hypertension: 'a wake-up call'
 B. Pitt and P. Rossignol

113

- Dietary Counseling for a high potassium diet – consider the DASH diet
- "In patients on a thiazide diuretic switch to a potassium sparing diuretic which should be a mineralocorticoid receptor antagonist in patients with resistant hypertension and/or those with concomitant heart failure with a reduced left ventricular ejection fraction (HFREF). If the serum potassium remains <4.0 mmol/L, a) in patients on a non RAAS-I based antihypertensive strategy consider switching to a RAAS-I based strategy at maximum tolerated doses. If serum potassium is still <4 mmol/L, b) add a potassium supplement."
- Dietary counseling for a low potassium diet.
- Discontinue potassium supplements and potassium sparing diuretics. Add a thiazide diuretic at appropriate doses if not already on one (or a loop diuretic in patients with an eGFR < 30 ml/min/1.73 m²). In patients at low cardiovascular risk switch from a RAAS-I based antihypertensive to a non-RAAS-I strategy. In patients with concomitant CKD and/or HFREF temporarily discontinue RAAS-Is and consider adding a potassium lowering agent. This may allow the RAAS-I to be reintroduced and up titrated to target doses.

Prevention and epidemiology

The association between physical activity and risk of mortality is modulated by grip strength and cardiorespiratory fitness: evidence from 498 135 UK-Biobank participants

C.A. Celis-Morales, D.M. Lyall, J. Anderson, S. Iliodromiti, Y. Fan, U.E. Ntuku, D.F. Mackay, J.P. Pell, N. Sattar, and J.M.R. Gill

116

CARDIOVASCULAR FLASHLIGHTS

Cardiac amyloidosis: still challenging

N. Laptseva, M. Zuber, P.K. Bode, and A.J. Flammer

122

Lethal heart failure with anti-mitochondrial antibody: an arrhythmogenic right ventricular cardiomyopathy mimetic

M. Koyama, T. Yano, K. Kikuchi, D. Nagahara, H. Ishibashi-Ueda, and T. Miura

123



Open Access Paper



For the podcast associated with this article, please visit <https://academic.oup.com/eurheartj/pages/Podcasts>



Visit EHJ's mobile site
<https://academic.oup.com/eurheartj>



www.eurheartj.org