

# Heart

Formerly British Heart Journal  
Journal of the British Cardiovascular Society

## Editor

Adam D Timmis (UK)

## Deputy Editor

John E Sanderson (UK)

## Commissioning Editor

Iqbal Malik (UK)

## Technology and Guidelines in Heart

Ceri Davies (UK)

## Images in Cardiology

Ajay Jain (UK)  
Andrew Wragg (UK)

## JournalScan

Alistair Lindsay

## Associate Editors

Jeroen Bax (Netherlands)  
Mike Burch (UK)  
Keith Channon (UK)  
Andrew Clark (UK)  
Gene Feder (UK)  
Brian Griffin (USA)

Bernard Keavney (UK)  
Charles Knight (UK)  
Jim Nolan (UK)  
Raphael Rosenhek (Austria)  
Richard Schilling (UK)  
Cheuk-Man Yu (Hong Kong)

## Statistical advisor

Ian Ford

## Education in Heart

### Series Editor

Peter Mills

### Project Manager

John Weller

## Section Editors

Martin Cowie, Pim de Feyter, Christian Hamm, Catherine M Otto,  
Richard Schilling, Alec Vahanian

## Editorial assistant

Stephanie Watkins

## Production editor

Sophie Pezaro

## Development editor

Claire Jura

## Managing editor

Janet O'Flaherty

## International Advisory Board

See full details page iv

## Guidelines for authors and reviewers

Full instructions are available online at  
<http://heart.bmj.com/fora>

## Subscription information

See p iv

## Copyright

© 2007 BMJ Publishing Group and British Cardiovascular Society.  
All rights reserved; no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission  
Authors are required to grant *Heart* an exclusive licence to publish; further details available online at [www.heartjnl.com/fora/licence.dtl](http://www.heartjnl.com/fora/licence.dtl)

## Disclaimer

*Heart* is published by BMJ Publishing Group Ltd, a wholly owned subsidiary of the British Medical Association, and the British Cardiovascular Society. The BMA grants editorial freedom to the Editor of *Heart*. *Heart* follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics.

*Heart* is intended for medical professionals and is provided without warranty, express or implied. Statements in the journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group, the British Cardiovascular Society or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group shall not be liable for any loss, injury or damage resulting from the use of *Heart* or any information in it whether based on contract, tort, or otherwise. Readers are advised to verify any information they choose to rely on.

- *Heart* is published by BMJ Publishing Group, copyediting services provided by Macmillan India Ltd, typeset by The Charlesworth Group, and printed in UK on acid-free paper by Latimer Trend & Co Limited, Plymouth
- Periodicals postage paid, Rahway, NJ. Postmaster: send address changes to: *Heart*, c/o Mercury Airfreight International Ltd, 365 Blair Road, Avenel, NJ 07001, USA



[www.publicationethics.org.uk](http://www.publicationethics.org.uk)

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics

# contents HEART

Volume 93 Number 2 February 2007

## Featured editorial

- 145 Biological pacemaking: a concept whose time has come...or is coming *M R Rosen*

## Editorials

- 147 Underuse of revascularisation in acute coronary syndromes *F-J Neumann, H J Büttner*
- 149 The effect of intensive lipid lowering on coronary atheroma and clinical outcome *E S Houslay, J Sarma, N G Uren*
- 152 Pregnancy and the various forms of the Fontan circulation *F Walker*

## Heart reviews

- 155 Heart failure with a normal ejection fraction *J E Sanderson*
- 159 Cardiac syndrome X: a critical overview and future perspectives *G A Lanza*

## Review

- 167 Reverse remodelling in heart failure with cardiac resynchronisation therapy *M St J Sutton, M G Keane*

## Rapid communication

- 172 Adding social deprivation and family history to cardiovascular risk assessment: the ASSIGN score from the Scottish Heart Health Extended Cohort (SHHEC) *M Woodward, P Brindle, H Tunstall-Pedoe, for the SIGN group on risk estimation*

## Acute coronary syndromes

- 177 Intervention in acute coronary syndromes: do patients undergo intervention on the basis of their risk characteristics? The Global Registry of Acute Coronary Events (GRACE) *K A A Fox, F A Anderson Jr, O H Dabbous, P G Steg, J López-Sendón, F Van de Werf, A Budaj, E P Gurfinkel, S G Goodman, D Brieger, on behalf of the GRACE investigators*
- 183 Acute coronary syndromes and their presentation in Asian and Caucasian patients in Britain *M Teoh, S Lalondrelle, M Roughton, R Grocott-Mason, S W Dubrey*

## Coronary artery disease

- 189 The coronary risk of cyclo-oxygenase-2 inhibitors in patients with a previous myocardial infarction *J M Brophy, L E Lévesque, B Zhang*

## Interventional cardiology

- 195 Effects of changing clinical practice on costs and outcomes of percutaneous coronary intervention between 1998 and 2002 *M A Denvir, A J Lee*

*J Rysdale, R J Prescott, H Eteiba, I R Starkey,  
J P Pell, A Walker*

## Cardiac imaging and non-invasive testing

- 200 A pretest prognostic score to assess patients undergoing exercise or pharmacological stress testing *A Morise, M Evans, F Jalisi, R Shetty, M Stauffer*
- 205 Left ventricular remodelling index (LVRI) in various pathophysiological conditions: a real-time three-dimensional echocardiographic study *S De Castro, S Caselli, M Maron, A Pelliccia, E Cavarretta, P Maddukuri, D Cartoni, E Di Angelantonio, J T Kuvin, A R Patel, N G Pandian*

## Epidemiology

- 210 Temporal decline in the prognostic impact of a recurrent acute myocardial infarction 1985 to 2002 *P Buch, S Rasmussen, G H Gislason, J N Rasmussen, L Køber, N Gadsbøll, S Stender, M Madsen, C Torp-Pedersen, S Z Abildstrom*

## Diabetes, lipids and metabolism

- 216 Levels of homocysteine are increased in metabolic syndrome patients but are not associated with an increased cardiovascular risk, in contrast to patients without the metabolic syndrome *G R Hajer, Y van der Graaf, J K Olijhoek, M C Verhaar, F L J Visseren, for the SMART Study Group*

## Cardiovascular surgery

- 221 Outcome after redo coronary artery bypass grafting in patients with ischaemic cardiomyopathy and viable myocardium *V Rizzello, D Poldermans, A F L Schinkel, E Biagini, E Boersma, A Elhendy, F B Sozzi, A Palazzuoli, A Maat, F Crea, J J Bax*
- 226 Plasma N-terminal pro-B-type natriuretic peptide as long-term prognostic marker after major vascular surgery *H H H Feringa, O Schouten, M Dunkelgrun, J J Bax, E Boersma, A Elhendy, R de Jonge, S E Karagiannis, R Vidakovic, D Poldermans*
- 232 Influence of concomitant coronary artery bypass graft on outcome of surgery of the ascending aorta/arch *P Narayan, C A Rogers, M Caputo, G D Angelini, A J Bryan*

## Basic research

- 238 Granulation encapsulated stent: a new therapeutic approach for vascular implantation *L Tang, X Chen, S Tang, T LaLonde, J M Gardin*

## Scientific letters

- 244 Effects of atorvastatin and vitamin C on forearm hyperaemic blood flow, asymmetrical dimethylarginine levels and the inflammatory process in patients with type 2 diabetes mellitus *D Tousoulis, C Antoniadis, C Vasiliadou, P Kourtellis, K Koniari, K Marinou, M Charakida, I Ntarladimas, G Siasos, C Stefanadis*
- 247 Carvedilol improves endothelium-dependent vasodilation in patients with dilated cardiomyopathy *K Nishioka, K Nakagawa, T Umemura, D Jitsuiki, K Ueda, C Goto, K Chayama, M Yoshizumi, Y Higashi*
- 249 Haemodynamic significance of ostial side branch nipping following percutaneous intervention at bifurcations: a pressure wire pilot study *N G Bellenger, R Swallow, D S Wald, I Court, A L Calver, K D Dawkins, N Curzen*
- 251 Targeting drug-eluting stents to lesions at high risk of restenosis: a flawed approach? *A K Siotia, A C Morton, S Mafidi, C Wales, C Newman, J Gunn*
- 253 The effects of the angiotensin II receptor (type I) antagonist irbesartan in patients with cardiac syndrome X *S J Russell, E M Di Stefano, M T Naffati, O Brown, S Saltissi*
- 255 Relation between nitric oxide metabolites and haemoglobin concentrations in patients with ischaemic heart disease *F Andreotti, G Coluzzi, A Lavorgna, F Marzo, E Di Stasio, C Carrozza, C Zuppi, F Crea*

## Education in Heart

- 258 Antiplatelet treatment for coronary heart disease *N Clappers, M A Brouwer, F W A Verheugt*
- 266 Diagnosis and management of patients with aortic dissection *H Ince, C A Nienaber*
- 271 Management of tricuspid valve regurgitation *M J Antunes, J B Barlow*

.....  
**JournalScan**

- 277 Cardiovascular highlights from non-cardiology

.....  
**Miscellanea**

- 151 Images in cardiology: Left ventricular pressure–volume loops during mechanical alternans in a patient with dilated cardiomyopathy *T Kashimura, M Kodama, Y Aizawa*
- 199 Images in cardiology: Retrograde coronary interventions of chronic total occlusions *J-Y Moon, D Choi, Y Jang*
- 215 Images in cardiology: Spontaneous coronary vasospasm in the catheterisation laboratory: prompt resolution after atropine

injection *S Turkoglu, U Arpag, T Timurkaynak*

- 237 Images in cardiology: Coronary artery–left atrial fistula caused by feeding artery rupture in cardiac myxoma *K Zen, T Asai, H Tatsukawa, H Matsubara*

- 246 Images in cardiology: Free-floating left atrial thrombus formed in a few weeks in a patient with a normal mitral prosthesis *B A Popescu, B Radulescu, C Ginhina*

- 257 Web Top 10

.....  
**Electronic pages**

- e2 The British Society for Cardiovascular Research Autumn Meeting 2006, a joint meeting with the British Atherosclerosis Society