

Foreword

Magdi El-Omar



Dr Magdi El-Omar is a consultant interventional cardiologist at the Manchester Heart Centre and an honorary senior lecturer at the University of Manchester, Manchester, UK. He graduated from St Bartholomew's Hospital, London, UK, in 1988 and undertook his postgraduate general medical training in London and Oxford. He then completed his general cardiology training in Birmingham, Oxford and Wales before subspecializing in coronary intervention. The latter included a 2.5-year clinical/research fellowship in interventional cardiology at the Cardiovascular Research Foundation and the New York University Medical Centre, New York, NY, USA. During his time there, he worked closely with leaders in the field, including doctors Greg Stone, Martin Leon, Gary Roubin, Frederick Feit and Aaron Marcus. Dr El-Omar has been involved in research for over 25 years. He undertook a 2-year British Heart Foundation Junior Research Fellowship in basic science (diabetic cardiomyopathy in a rat model) in 1997–8, which led to the award of an MD degree from the University of London. He has since been actively involved in clinical research, especially in the fields of acute coronary syndromes and coronary intervention. He has authored more than 65 peer-reviewed articles, mostly in high-impact journals. He has been a local principal investigator for several landmark, international, multicentre trials (e.g. HORIZONS-AMI, INFUSE-AMI, TOTAL, TWILIGHT, etc.). He is actively involved in education and training and is a course co-director of the International Complex Cardiovascular Catheter Therapeutics Conference in the USA.

Welcome to the latest issue of *Heart International*. This edition includes a range of articles on topics showcasing the latest advances in our understanding and treatment of cardiovascular disease.

We begin with focus on the hereditary cardiac disorder, hypertrophic cardiomyopathy, which previously had a limited treatment options. However, with the approval of the myosin inhibitor, mavacamten, therapeutic possibilities have broadened. In an editorial, Desai and Hajj Ali discuss the clinical evidence for mavacamten and its potential limitations.

Next, we move onto a practice pearl discussion on heart failure. Although best practice recommendations suggest palliative care be part of heart failure management, there remains uncertainty about how to integrate this into existing clinical practice. Latimer et al. provide guidance on the use of palliative care at critical points during heart failure progression.

We continue this edition with a series of review articles on cardiovascular disease, heart failure and interventional cardiology. Sharma et al. discuss approaches for identifying and managing patients with low-flow, low-gradient severe aortic stenosis. Gustavo Samaja discusses the use of balloon aortic valvuloplasty in transcatheter aortic valve implantation, including the technical improvements that may make it an effective tool across a variety of clinical scenarios. In patients with mitral annular calcification, surgery is generally considered too high-risk and consequently transcatheter mitral valve replacement is an alternative option. Agrawal et al. discuss the importance of preprocedural imaging to ensure optimal patient selection and procedure outcomes, and minimize potential complications. Transthyretin amyloidosis cardiomyopathy was previously considered a terminal disease. However, with the development of patisiran, a small interfering RNA therapy which inhibits transthyretin, the disease is now considered treatable. In this review, Ioannou et al. discuss the clinical data supporting the use of patisiran in transthyretin amyloidosis cardiomyopathy, including how to monitor for a cardiac response.

The management of congestion is a key goal in the treatment of heart failure, and can be aided by the measurement of blood volume. Wayne Miller reviews the contemporary BVA-100 methodology, and discusses its clinical implications for individualized volume management and improving risk stratification.

Patients with diabetes mellitus with coronary artery disease undergoing percutaneous coronary intervention have an increased risk of adverse outcomes. However, this risk is uncertain in patients with prediabetes. In a systematic review and meta-analysis, Ahsan et al. assess the evidence for percutaneous coronary intervention outcomes in prediabetes. In patients with atrial fibrillation at high-risk of stroke, anticoagulants or vitamin K antagonists are typically the standard of care. However, percutaneous left atrial appendage occlusion may be an alternative treatment strategy, particularly in patients with high bleeding risk and anticoagulant contraindications. Agasthi and Pujari review the standard protocols following left atrial appendage occlusion, including possible complications and limitations in our current knowledge.

Finally, on the topic of arrhythmias, Shah et al. report a case of bradycardia, renal failure, atrioventricular nodal blockade, shock and hyperkalemia (BRASH) syndrome involving digoxin toxicity. In the resolution of the case, the need for early and aggressive treatment to maximize positive outcomes is demonstrated.

The editors of *Heart International* would like to thank all contributors for the insightful and informative articles provided for this edition. We are also grateful to all organizations and society partners for their on-going support, and the continued involvement and advice of our editorial board. Finally, we hope that you will find this edition informative and interesting. □