

RCPE symposium – Cardiology

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The Cardiology symposium was held on 1 November 2017 at the Royal College of Physicians of Edinburgh

Declaration of interests No conflicts of interests to declare

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New challenges continue to face the discipline of cardiology. The growing population of adults with congenital heart disease (ACHD) poses challenges for the general cardiologists and ACHD subspecialists. Valvular heart disease, cardio-oncology and contemporary devices have all seen recent developments. This symposium reviewed these new developments and there were workshops on myocarditis, device therapy for heart failure and evaluation of aortic stenosis, addressing special interests in these areas.

Session 1 – Valvular disease: a global perspective

Rheumatic heart disease (RHD) remains a common health problem in the developing world, accounting for most cases of mitral valve disease. Dr Rick Steeds (Birmingham), provided an overview on the WHF criteria for echocardiography in RHD.¹ The standardised criteria aim to permit rapid and consistent identification of individuals with RHD and hence allow enrolment into secondary prophylaxis programs. Dr Steeds discussed the Addis Ababa communique report on eradication of RHD in Africa by 2025.

Dr Susanna Price (London) demonstrated the essential role of early surgical approach to reduce mortality and morbidity in infective endocarditis (IE). She discussed the changing epidemiology of IE in the world, especially in the context of rising geriatric populations, intravenous drug users, increasing device and structural interventions such as TAVI, etc. Antibiotic prophylaxis originally abandoned by the NICE guidelines (2008) is of increasing importance after the increased rate of IE cases observed following the decrease in using antibiotic prescriptions by dentists. In fact the ESC

guidelines² maintain the principle of antibiotic prophylaxis in high-risk patients.

Professor Simon Ray (Manchester) explored the main mitral valve disease in the developed world: mitral regurgitation. He presented the most recent data in the management of primary and secondary mitral regurgitation. Mitral valve repair is the optimal surgical procedure to treat mitral valve regurgitation of many aetiologies. The results of the STITCH³ trial suggested that adding mitral valve repair to coronary artery bypass grafting in patients with left ventricular dysfunction and moderate to severe mitral regurgitation may improve survival compared with coronary artery bypass grafting alone or medical therapy alone.

Session 2 – Looking to a realistic future

Dr Alex Lyon (London) modelled a leading interdisciplinary approach to preventative and targeted medicine in cardio-oncology. This important field of study, aimed at understanding the cardiac complications of oncology treatments, has gained a growing interest and oncology research has helped with better understanding the heart failure mechanisms.

In the breakout sessions, Dr Anne Scott (Borders) provided an update on the echocardiographic evaluation of aortic stenosis. She discussed the latest ESC 2017 guidelines proposing the use of various indices together including dimensionless index, AV valve area, peak jet velocity, peak/mean gradient and VA impedance. Dr Nicholas Kelland (Sheffield) discussed the importance of device therapy in heart failure and how to select the patients who will really benefit. Dr Simon Williams (Manchester) presented historical

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data on aetiology, diagnosis and management of patients with myocarditis. The lack of evidence on steroids and immunotherapy as contemporary treatment on myocarditis was emphasised.

Session 3 – Current dilemmas in cardiology

Dr David Northridge (Edinburgh) demonstrated the positive results of recent trials on patent foramen ovale closure (RESPECT, CLOSE and REDUCE) which suggest that patent foramen ovale closure is safe, effective and should be offered to selected young patients with cryptogenic stroke. Data on left atrial appendage closure devices are not consistent. Dr Stuart Hutcheon (Dundee) presented six common scenarios of troponin misuse and how to best manage patients with raised troponin levels or 'Troponinitis'.

Session 4 – Adult congenital heart disease

Dr Patrick Gibson (Edinburgh) presented the importance of echocardiography, cardiac MRI and the increasing utility of CT in the diagnosis and follow up for patients with ACHD. Dr Nikki Walker (Glasgow) highlighted the challenges in assessing these cases and the need to follow a step by step approach in dealing with medical emergencies. The role of early DC cardioversion in cases of atrial flutter in patients with Fontan circulation was emphasised. Dr Sara Thorne (Birmingham) demonstrated a guide to investigating patients with shunts, interpreting the results and managing the patients. The evaluation and management of cardiac lesions associated with right to left shunt and left to right shunt were discussed with advice on pitfalls in the interpretation of data.

Take home message

This symposium delivered an excellent update and balanced overview on key emerging cardiology topics. Mitral valve repair remains the gold standard in the management of most mitral regurgitation cases. Cardio-oncology as a speciality is expanding quickly as there is a growing population of patients who require specialist input. Tertiary hospitals should develop local expert teams to deal with the increasing demand. ACHD suffers from paucity of evidence and the challenges faced by general cardiologists are mandating the need for the same rigour of research and evidence-based guidance as associated with the core cardiology topics.

References

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- 3 Velazquez EJ. Coronary-artery bypass surgery in patients with left ventricular dysfunction. *N Engl J Med* 2011; 364: 1607–16.