BGS Cardiovascular Section 21st Annual Meeting Conference Report
'Modern Technology Use for Cardiovascular Diseases in the Elderly'

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Introduction
Around 100 delegates attended this conference to evaluate the state of the art of technology in cardiovascular and cerebrovascular disease in the elderly.

Morning sessions
The main theme of the conference was modern technology for use in cardiovascular diseases in older people. The introductory session, sponsored by Novartis, was jointly presented by Dr Christopher Critoph from Bournemouth and Dr Victor Sim from University Hospital Llandough. The challenges in managing heart failure in older patients are vast, but newer drugs such as Entresto have some promising data. Indeed a multidisciplinary approach with cross collaboration between geriatric medicine and cardiology is key to achieving optimal care.

Device Therapy and Indications
Technological advances continue to allow opportunities for older patients to benefit from a range of device therapies. However, the DANISH RCT shows that in those over 70 years all-cause mortality is similar with and without an ICD. Professor Richard Schilling pragmatically explored this in his well-received talk. Clinicians need to talk frankly about the downsides of ICD implantation such as the lack of effect on quality of life as well as the possibility of inappropriate shocks (although rarer than with previous devices).

CRT
On discussion of the use of cardiac resynchronisation therapy (CRT) there is a reduction in mortality and symptoms, and improvement in quality of life from this therapy. This has to be carefully balanced with the higher complication rates. In those with a wide QRS and impaired LV function who want to avoid an arrhythmic death, CRT-D (CRT-defibrillator) should be considered.

Pacemakers
In discussion of pacemaker implantation in older persons, 24 hour tapes are often over-used with little diagnostic yield. It's all in the history of clear syncope likely to be cardiac in origin and more importantly symptom rhythm correlation on heart rate recordings.. Indications for proceeding straight to a pacemaker were illustrated by two interactive cases. An important take home message was that complete heart block is the only bradycardia that has been shown to have prognostic significance, and therefore is the only clear indication for pacing without symptoms.

In conclusion when faced with multiple comorbidities it is most important to understand why we are implanting any cardiac device, and allow this to frame the discussion.

Geriatricians have expertise to offer in this area. ICD, pacing, and CRT all impact on the character, speed and timing of the journey towards death. Patients should be given the chance to discuss illness trajectories and end of life scenarios whilst considering any therapeutic cardiac device..

End of life discussion in those with ICD (a palliative care approach)
Deactivating an implantable cardiac defibrillator (ICD) device is emotive and challenging for patients and their families. Perceptions are often centred on negative thoughts and discussions. “Does this mean the patient is now dying?” “And will this be imminent?” Dr Karen Hogg, consultant cardiologist at Glasgow Royal Infirmary brought clarity and offered guidance on this complex issue via pre-recorded video link, followed by a live discussion.

Uncoordinated care and a lack of discussion on deactivation at the time of initial consent are some of the issues faced. Other barriers stem from lack of systems of support, the physician and patient perception of their disease, the timing of deactivation and patient understanding of their likely prognosis.. The heart failure trajectory can be chaotic and unpredictable and because of delayed discussions, these generally occur ‘too late’. Early palliative care is appropriate and can be adopted into an integrated care model in conjunction with cardiology, followed by bereavement care. The need to identify a specific ‘time’ for deactivation may be removed by moving towards this strategy.

Pacemaker malfunction?
The differential diagnosis ‘pacemaker malfunction’ is usually not due to a pacemaker fault - this is quite rare. Troubleshooting tips and innovations came from Dr Jonathan Behar, ST7 in cardiology (EP and devices) at the Barts Heart Centre. Again the importance of a good history cannot be underplayed – always think of the symptom/arrhythmia correlation. Patients with a device can often still present with syncope of non-cardiac origin. The latest developments in the world of pacing such as leadless devices are exciting and innovative and the talk concluded with a snapshot of this new therapy.

Afternoon session
Vifor Pharma sponsored the first session on correcting iron deficiency in the cardiac and renal patient. Joint speakers Dr Carla Plymen and Dr Shuli Levy from Imperial College London shared their clinical experience and knowledge on this topic. Iron deficiency should be corrected in heart failure and renal failure with symptomatic benefit. The challenge of diagnosis was emphasised with the need to check iron, transferrin saturations and ferritin key to helping decision making. The use of IV iron was discussed in a subgroup that may not respond to oral therapy.

Dr Michael Okorie from Brighton and Sussex medical school spoke on treating resistant hypertension. Confirming clinic blood pressure and addressing confounders are key to getting this right. The sustained nature of hypertension that may be evident on ambulatory or home blood pressure monitoring does correlate with outcome. Liquid preparations and transdermal routes can also be considered in those unable to take tablets.

Professor Iris Grunwald delivered a highly innovative talk on thrombectomy after stroke, sharing her experience of setting up the mobile stroke unit. Patients can now be treated quite literally at their front door when the mobile unit arrives.

The careful balance of risk versus benefit from thromboprophylaxis after stroke was discussed by Christine Roffe from Royal Stoke university hospital. The balance appears to be in favour of omitting thromboprophylaxis due to the greater risk of symptomatic intracranial haemorrhage compared with the risk of symptomatic pulmonary embolism. This risk is greatest in the first fourteen days, but each case should be judged individually. Interestingly the number needed to treat to prevent one VTE is 430 in the recent RCT involving treatment with rivaroxaban for 45 days after medical admission.

Conclusion
The delegate feedback was very positive, with a variety of educationally stimulating talks from high quality speakers. The 22nd annual meeting on 'The ageing vasculature – where can we intervene?' is on Friday 25th January 2019 at the Royal College of Obstetricians and Gynaecologists.

Poster prize winners

1st prize, £150, Dr Joanne Taylor [Low physical activity in older patients detected by cardiac devices – a potential target for intervention?]

2nd prize, £100, Dr Shahzad Akbar [Management of atrial fibrillation in admitted frail elderly patients]

3rd prize (joint), £50, Dr Izhar Ali [Cardiac investigations post ischaemic stroke – how to balance need against resources] and Dr Esther Hindley [A novel use for the electronic frailty index: improving the referral pathways into heart failure clinics for older adults]

The next meeting of the BGS Cardiovascular Section 'Brains & Hearts: Working together' will take place at The Royal College of Obstetricians & Gynaecologists, Regent's Park, London on Friday 6th September 2019.

We will be inviting poster submissions on any cardiovascular topic and further details can be found on our website www.bgscv.org.uk

If you would like to become a member of the Cardiovascular Section and receive details of our forthcoming meetings, please register on our website free of charge.

For any further enquiries about the section please contact our secretariat, Nicola Razzell, on nicola.razzell@lamedica.com