Introduction

Earlier this year the British Society for Heart Failure (BSH) held its 4th Annual Medical Training Meeting where a broad range of management and therapeutic options in heart failure were presented. A straw poll demonstrated the majority of delegates to be cardiologists or cardiology trainees, many with subspecialty interest in heart failure, but there was also significant representation from allied medical specialties, general practice and nursing.

Pharmacological therapies in heart failure

Dr Suzanna Hardman set proceedings underway by discussing the use of beta-blockers in patients with heart failure and obstructive airways disease. There is strong evidence for the benefit of beta-blockers in heart failure (trials include MERIT-HF, COPERNICUS, CIBIS II [1-3]) but the evidence for adverse effects in lung disease is based on animal studies, case reports and small scale human studies. The European Society of Cardiology (ESC), the National Institute for Health & Clinical Excellence (NICE) and the Cochrane Reviews fully endorse beta-blockade in chronic obstructive airways disease (COPD) yet only 18% of elderly patients with chronic heart failure (CHF) and COPD take this evidence-based prognostic class of drugs. Whilst beta-blockade is safe in COPD, long-term data in asthma is awaited and beta-blockers should be used cautiously and under close monitoring in these patients.

Dr Paul Kalra presented an interactive session on renin-angiotensin-aldosterone system (RAAS) drugs in patients with renal impairment. Patients with moderate-severe chronic kidney disease (CKD) are excluded from many CHF trials of RAAS drugs but 30% of the CHARM dataset [4] had an estimated glomerular filtration rate (eGFR) <60ml/min. CHF associated with CKD is common and has a worse prognosis. However, these patients have a lower uptake of RAAS drugs. RAAS blockade in this group is possible, albeit with very close monitoring of renal function. Hyperkalaemia can be a limiting factor and cardiologists may learn from nephrologists by giving advice on low potassium diets.

Prof Martin Cowie discussed controversies surrounding statins in CHF by presenting data from the CORONA and GISSI-HF trials [5-6]. Both studies demonstrated no mortality benefit with Rosuvastatin in established HF despite significant improvements in lipid profiles. However, in the fish-oil arm of GISSI-HF, there was a modest benefit with Omega-3 supplements in addition to standard therapy.

Clinical cases

Interactive case presentations provided a useful insight into the management of unusual cases. Dr Dominic Kelly illustrated a case of biventricular pacemaker implantation into a patient with CHF and left-sided superior vena cava. Dr Steven Shaw presented a patient with post-partum cardiomyopathy, successfully bridged to recovery with a HeartWare left ventricular assist device (LVAD), with an interesting debate on the length of treatment with heart failure medications. Dr Alison Seed discussed a patient with Acromegaly and decompensated CHF with debate on the optimal timing of beta-blockers in acute heart failure (AHF). Dr Lisa Anderson presented a case of AHF on cessation of heart failure drugs following resolution of previous myocarditis.

Other considerations in CHF

CHF is a common cause for hospital admission. Prof Henry Dargie presented data from the National Heart Failure Audit which has information submitted from >85% of hospital trusts in England and Wales with >80,000 CHF admissions. Admissions to cardiology wards are associated with a nearly doubled prescription rate of prognostic medications and improved outcome.

Engaging primary care in the management of patients with CHF is important and Dr Jim Moore discussed measures to involve general practitioners. Setting standards through NICE and the Quality and Outcomes Framework has enabled primary care physicians to improve care in CHF although many challenges remain. Standards are set according to evidence-based medicine and Prof Andrew Clark warned of potential pitfalls in interpreting clinical trials. In an entertaining presentation he demonstrated how one should be wary of class effects, sub-group analyses, non-
There have been many advances in imaging techniques in CHF and Dr Ceri Davies gave an informative presentation on the use of cardiac magnetic resonance (CMR) imaging. In the recent CE-MARC trial [7] CMR outperformed nuclear imaging in the assessment of patients with coronary disease.

**Non-pharmacological strategies in heart failure**

Mr Christopher Young presented dilemmas in assessing patients with aortic stenosis (AS) and LV impairment. Surgical mortality is high (up to 22%) with aortic valve replacement (AVR) in the presence of LV impairment but five-year survival is good (69%) and therefore these patients should not routinely be denied surgery. Patients unsuitable for surgical AVR can be considered for percutaneous transcatheter aortic valve implantation (TAVI). Dr Philip MacCarthy discussed the development of the TAVI technique which is associated with equivalent survival to surgical AVR in high-risk surgical patients but a 20% absolute risk reduction in mortality compared to medical therapy in inoperable disease [8-9].

Despite optimal therapy, some patients develop worsening CHF and ultimately, may require mechanical support or transplantation. Dr Simon Williams presented the indications for cardiac transplantation (from recent UK guidance) [10] and Dr Nick Banner discussed the developments in LVAD technology. LVADs have become smaller with improving survival but haemorrhage, infection and device failure remain significant risks.

**Conclusion**

The BSH meeting offers valuable training in heart failure to a broad range of specialties. Informative presentations from experts in the field were enjoyable and offered opportunities for interaction, allowing a detailed understanding of difficult issues in the management of CHF.

**References**