

BSH 5th Annual Heart Failure Day for Training and Revalidation

This vibrant meeting of the British Society for Heart Failure (BSH) included exciting lectures and interactive case-based discussions focusing on valvular heart disease, recent clinical trials and advice on requisite interview skills for consultant appointments with emphasis on management issues in heart failure (HF) in the context of a rapidly evolving NHS.

Valvular heart disease can easily be considered an isolated problem. Many of the day's talks highlighted however, that the clinical syndrome of heart failure is often related to multiple valvular pathologies, and the management of disease in one valve may be closely intertwined with that of another. Dr Bernard Prendergast (Oxford) focused on the management of mitral regurgitation, but drew attention to the 2012 European Society of Cardiology guidelines on valvular heart disease as a valuable resource in all valve disease [1].

Mitral regurgitation (MR) can be primary, reflecting intrinsic valve pathology, or secondary; either functional, where left ventricular (LV) dilatation precludes valve co-aptation, or 'ischaemic MR' caused by coronary artery disease. These are very different conditions, requiring different approaches to management, but in so far as they pertain to heart failure, they all confer a less good prognosis. In the case of primary MR however, Dr Prendergast pointed out that the development of symptoms suggests a failure in management. Early intervention is crucial. In the presence of poor LV function, valve repair may improve symptoms, but its effect on survival is unknown and preoperative symptoms are a poor prognostic indicator.

Secondary MR is more complex. Comorbidities are often present, and confer a worse prognosis; although surgery often results in functional improvement, there is no evidence that it prolongs life, and operative mortality is higher. Medical management can lead to reverse left ventricular remodelling thereby reducing regurgitation. Optimisation of HF treatment should therefore always be the first step. In the context of ischaemic MR, surgical repair can be more suitable, but maximal benefit is obtained when combined with coronary artery bypass surgery in a patient with LV ejection fraction at >30%. Percutaneous procedures may become more commonplace following the EVEREST II trial, which showed no clear difference between surgery and use of the mitral valve clip device, with low procedural risk, although further large randomised studies are still needed [2].

Prof Chris McGregor (London) drew attention to the

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management of tricuspid regurgitation, an often overlooked condition, but one that is associated with high mortality especially when moderate or severe. Whilst guidelines on management are often discordant or incomplete, Prof McGregor argued for repair rather than replacement when surgery is performed. Of particular difficulty is the coexistence of mitral and tricuspid regurgitation. Concomitant surgery on both valves is considered beneficial in some cases, but patient selection is difficult. Furthermore, tricuspid disease often worsens or becomes apparent following mitral valve surgery. As elsewhere there is a strong need for further research to clarify the role of intervention on the tricuspid valve.

Dr Douglas Muir (Middlesbrough) provided an excellent update on transcatheter aortic valve implantation (TAVI). The PARTNER studies have demonstrated acceptable complication rates, with reduction in all cause mortality compared to best medical therapy, and non-inferiority at one year compared with surgery in patients deemed unsuitable surgical candidates, or considered too high risk for conventional valve surgery, and funding for the procedure is becoming more widespread throughout the UK [3]. Conventional aortic valve replacement is still the gold standard however, and all patients should be carefully discussed by a dedicated multidisciplinary team in the work-up for intervention.

Prof Martin Cowie (London) highlighted the results of several trials demonstrating that we still lack any clear evidence for the management of heart failure with preserved ejection fraction (HF-PEF) [4,5]. Prof Ian Squire (Leicester) then explained how the novel agent LCZ696 (an angiotensin neprilysin inhibitor) has shown promise by demonstrating significant reduction of N-terminal pro-hormone of brain type natriuretic peptide (NT-proBNP) when compared with valsartan [6]. Similarly, the RELAX-AHF study yielded potentially exciting results demonstrating improved dyspnoea and 180-day mortality with the use of serelaxin (a recombinant hormone of human relaxin-2) in



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acute heart failure [7]. Both Professors McMurray and McDonagh emphasised the need for further research.

Unfortunately, other trials have been notable more for their disappointing results. Much anticipation surrounded the CARESS-HF trial of ultrafiltration compared with an aggressive diuretic regime in acute decompensated heart failure. Perhaps surprisingly, this demonstrated a rise in serum creatinine in the ultrafiltration group, with no change in weight loss and a greater percentage of adverse events [8]. Similarly, the RED-HF trial demonstrated that darbepoetin alfa (an erythropoietin analogue) conferred no benefit on death or hospital admissions in patients with heart failure and anaemia [9].

One of the afternoon sessions focused on the consultant interview including management issues. Understanding problems at a local and national level is becoming crucial when tackling interviews. There is more pressure to move heart failure care into the community, alongside the need to improve hospital care. Clinicians, and commissioners will need to work together to ensure patients' best interests are met so it was reassuring to hear a consistent message from Dr Hardman, Baxter and Rowell. However, as Dr Rowell pointed out, with a recent survey of clinical commissioning groups reporting that 47% felt ready, 32% not ready, and 21% not sure, who knows what's round the corner? The sessions concluded with advice from Dr Flett, who has just successfully survived a consultant interview and was about to join the Southampton HF team.

Acknowledgement

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Further information

The next Heart Failure Day for Training and Revalidation will take place on 20th March 2014, in Glasgow. If you would like more information about the BSH, please email info@bsh.org.uk or visit the website at www.bsh.org.uk