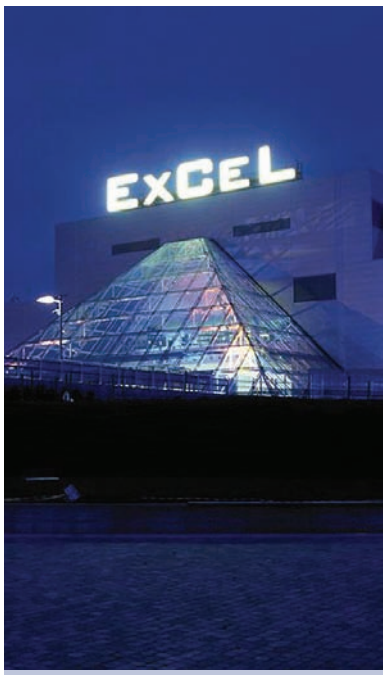
BRITISH SOCIETY FOR HEART FAILURE

Newsletter

ISSUE 24 SUMMER 2009

This issue reports highlights from the British Cardiovascular Society (BCS) Annual Conference & Exhibition, held at the ExCel Centre in London on 1–3 June 2009.

The British Society for Heart Failure was involved in four conference sessions on heart failure, which were held jointly with other affiliated groups of the BCS. Another heart failure session was organised jointly by the BCS and the American College of Cardiology.



Forthcoming BSH meetings in 2009/2010

12th BSH Annual Autumn Meeting
26–27 November 2009
Queen Elizabeth II Conference Centre, Westminster, London

BSH Trainee Meeting 2010
21 April 2010
National Heart and Lung Institute, London

Heart failure or heart success

Joint session with the British Association for Nursing in Cardiovascular Care, Heart Care Partnership UK and the British Association for Cardiac Rehabilitation

In a session discussing heart failure services, Martin Cowie (London) highlighted specific areas that need to be tackled over the next few years: the age/gender bias in care, waiting time for echocardiography, management of acute heart failure and access to cardiac resynchronisation therapy (CRT).

The age and gender bias in heart failure care was highlighted in the Healthcare Commission's Acute Hospital Portfolio audit. This showed that angiotensin-converting enzyme (ACE) inhibitors, beta-blockers and aldosterone antagonists are 15–20% less likely to be prescribed on discharge to women than to men. Age bias was also clear, with a 2–3% lower chance of being prescribed these life-saving drug therapies for every year of increasing age.

Professor Cowie said that lower delivery of care to women was not all physician-related. There was also bias related to patient behaviour and expectations of care. "But the problem remains that women with heart failure, who are often elderly, are not receiving best care," he said.

On the positive side, heart failure prognosis had improved markedly in recent years, largely because of better diagnosis and the development of chronic disease management programmes. Survival was much better than 10 years ago and there had been a reduction in hospitalisation rates.

The recent focus had largely been in chronic heart failure. Improvement was now needed in acute care, where in-hospital mortality, at 15%, was much higher than in some continental neighbours. Professor Cowie said that he was beginning to favour the idea of acute heart failure units as these would highlight the fact that patients are high risk and need specialist input from admission.

In terms of access to echocardiography, the Healthcare Commission's 2007 Heart Failure Service Review reported as "good progress" the fact that 72% of patients waited less than 13 weeks for echocardiography. But Professor Cowie said this figure was unacceptable. "We have treatments that dramatically improve prognosis and we must reduce delay in diagnosis."

Action was also needed with regard to the low level of CRT implantation in some parts of the country. The latest Network Devices Survey Group report showed widely differing access to CRT.[1]

Picking up on the issue of acute heart failure care, Suzanna Hardman (London) said that secondary care is failing patients with heart failure. Much of the heart failure mortality and morbidity across the UK results from failure to deliver existing care. "We are not yet implementing the treatments that are known to be beneficial," she said.

She suggested that all patients with suspected heart failure should have an accurate diagnosis within 48 hours of admission, there should be inpatient optimisation of therapy and steps must be taken to establish the aetiology.

A change in attitude was also needed: "We need to start recognising that we can cure these patients and should not see death from heart failure as inevitable."

Comparing care of heart failure patients with care of cancer patients, Dr Hardman said it was inconceivable that patients with cancer would not see a specialist promptly for accurate diagnosis and initiation of treatment; the patient would probably see a range of specialists and there would be no emphasis on early discharge. In contrast, patients with suspected heart failure often never see a cardiologist, 60% of patients leave hospital without a diagnosis and there is an obsession with length of stay rather than quality of care.

A shared-care approach was implemented at the Whittington Hospital, London, in 2000 for identifying and treating patients with heart failure. Patients remain under the care of a general physician but are seen on a regular basis by a heart failure specialist. The hospital protocol is for patients with suspected heart failure to receive echocardiography within 48 hours, medical therapy is optimised (with beta-blocker uptitration continuing after discharge) and patients are not discharged until they have been stable for 48 hours. Early follow-up is organised, and community rehabilitation arranged before discharge.

Evaluation of this service showed better 3- and 12-month survival than reported in trials from other centres that did not have a strategy of inpatient optimisation of care.

Remote monitoring

Remote monitoring (telemonitoring) is one of the emerging models of care being developed to help support heart failure patients.

Jillian Riley (London) said that patients with heart failure quite rightly want convenient and timely care, and to trust the professionals who are providing that care. Remote monitoring is one way of helping to meet the challenge of increasing patient expectations.

She outlined the results of the recent Home-HF* randomised controlled study of home telemonitoring.[2] The London-based study compared usual specialist care with telemonitoring in an elderly population of heart failure patients. The equipment used was simple, and monitored blood pressure, weight, oxygen saturation, heart rate and patients' symptoms. Information was

Jillian Riley: remote monitoring may help meet patients' increasing expectations

relayed through the home telephone line to a heart failure specialist nurse who contacted the patient if data were outside preset parameters.

There was no reduction in all-cause hospitalisation (the primary outcome) but there was a significant reduction in emergency hospitalisations for heart failure (i.e. there was more planned care). The monitoring was acceptable to patients and, by encouraging them to self-evaluate, it helped patients to understand their condition and to become more involved in managing their illness.

Ms Riley said that other telemonitoring studies also showed no effect on hospitalisation rates, although a trend to reduction in mortality has been reported. But it was debatable whether telemonitoring could be expected to produce the same reduction in all-cause hospitalisation seen in early models of care with nurse-led heart failure management given that background care has improved and patients are increasingly being optimised on medicines.

She saw remote monitoring as a useful tool to assist traditional models of management and increase accessibility to good care.

In discussion, Professor Cowie said that it is not clear how remote monitoring will fit in to care provision. "We are at the start of a learning process. Many healthcare professionals are challenged by the idea of lack of face-to-face contact. But the heart failure team will be able to input to a much larger number of patients if face-to-face contact is combined with remote monitoring for some patients."

*A list of study acronyms can be found on page 8

Heart failure: progress and challenges

Joint plenary session: British Cardiovascular Society and the American College of Cardiology

This session was dedicated to Philip Poole-Wilson in recognition of his contribution to the field of cardiovascular health. Professor Poole-Wilson, who died in March, had been scheduled to speak at the session.

In this session, speakers looked at progress made in heart failure treatment, challenges for the next 10 years and "dogmas to be challenged".

Michael Fowler (Stanford, California) highlighted how, over the past 25 years, the management of heart failure has moved from two drugs – digoxin and diuretics – to the current variety that, used in combination, can relieve symptoms and improve survival. In 1984, echocardiography was rudimentary, beta-blockers strongly contraindicated and there were no outcome trials.

However, he noted that all improvements have been in the treatment of patients with chronic heart failure and systolic dysfunction. Little is known about the treatment of heart failure with preserved ejection fraction (HFPEF) or acute heart failure.

Barry Greenberg (San Diego, California) identified progress in treating these conditions as one of three major challenges for the next decade.

He said that the processes underlying HFPEF are not fully understood. Some patients have infiltrative disease, some have covert reductions in contractile performance of the myocardium and some have labile hypertension that has led to the heart failure syndrome. Treating these different populations with the same drug therapy is unlikely to work.

Similarly, the basic mechanisms that trigger acute decompensated heart failure (ADHF) are not clearly identified. "We need greater clarity about the pathophysiology and patterns of deterioration in patients with HFPEF and ADHF to better design therapy to treat these conditions," Professor Greenberg said.

A second challenge was to reduce increases in heart failure incidence and prevalence with intensified efforts to modify lifestyle (particularly diet and exercise) and better management of recognised heart failure risk factors. For example, heart failure could be reduced by 50% with aggressive blood pressure control.

Noting that the reduction in mortality seen in clinical trials is not replicated in epidemiological studies or in registry data, Professor Greenberg said that his third challenge was to improve the implementation of evidence-based therapies. This might be achieved by increasing societal expectations of heart failure treatment and greater use of disease management multidisciplinary programmes.

Challenging the dogma

"We have to replace dogma with data," said John McMurray (Glasgow). His list of heart failure dogmas that should be challenged – and his reasons – included the following:

- '*An ACE inhibitor should be stopped if an increase in creatinine occurs*' – in the SAVE trial of post-myocardial infarction (MI) patients with left ventricular (LV) dysfunction, an increase in creatinine in the placebo group was associated with an increased number of events, but patients taking an ACE inhibitor whose creatinine increased continued to do well. Asked what creatinine level would prompt him to stop an ACE inhibitor, Professor McMurray said that he was "nervous if creatinine is greater than 200 µmol/L and anxious if it increases above 250."
- '*Benefit of beta-blockers is exclusively related to heart-rate lowering*' – the 2008 BEAUTIFUL trial with ivabradine had, indirectly, demolished this dogma. Ivabradine lowers heart rate but has no other cardiac effects. The trial involved patients with coronary artery disease and LV systolic dysfunction. Heart rate was lowered but there was no beneficial effect on clinical outcomes.
- '*Beta-blockers should not be used in patients with chronic obstructive pulmonary disease*' – data from CIBIS-ELD, presented at Heart Failure 2009, showed no change in forced expiratory volume in 1 second over 12 weeks in a group of elderly patients who were uptitrated on bisoprolol or carvedilol.

Barry Greenberg identified three major challenges for the next decade

- '*Patients with ischaemic heart failure must have a statin*' – there was a common view that findings in ischaemic heart disease should be transferred to patients with heart failure, but two recent trials showed no benefit from statin treatment in these patients.
- '*Drugs that lower blood pressure must be avoided in hypotensive heart failure patients*' – in COPERNICUS, baseline blood pressure did not influence response to carvedilol. Similarly, in the CHARM programme, there was no influence of blood pressure on candesartan efficacy. "Patients with lower blood pressure may be at greater risk and if we deny them these treatments we lose the opportunity to achieve clinical benefit," Professor McMurray said.
- '*CRT does not work in patients with ischaemic heart failure*' – new CARE-HF data showed that this was not true.[3]

Devices – pacemakers, ICD and CRT

Joint session with Heart Rhythm UK

Heart failure services and device services should be integrated, said Theresa McDonagh (London). This would replicate the "special care" provided in the major CRT trials and should give the best chance of replicating the positive trial results.

Dr McDonagh said that integrated services would be useful both in selecting patients for implantation and for post-implant care. Careful selection of patients for CRT was essential: it was important not only to consider who needs device therapy, but also who does not need it, particularly when considering CRT and a defibrillator (CRT-D) (or implantable cardioverter defibrillators [ICDs] alone).

At present there was little integration of care pre-implantation. But in future there was likely to be greater use of cardiac magnetic resonance (CMR) imaging in selecting patients for CRT, since placing leads near posterolateral scars was known to be associated with lower response.

In terms of post-implant device programming, there were now long-term data indicating that optimising the A-V delay (to avoid LV contraction before optimal LV filling) was probably useful. This required co-ordination of cardiologists, echocardiographers and pacing physiologists. The long-term value of optimising V-V delay was less clear.

Patients in the CARE-HF and COMPANION trials underwent rigorous 3-monthly follow-up after implantation, and this should also be followed in clinical practice.

Optimisation of a patient's drug therapy after implantation of a CRT device was important. CRT responders usually had increased cardiac output, increased blood pressure, improved renal perfusion and protection against bradycardia. Reduction in diuretic dose should be considered, and it might be possible to increase the dose of evidence-based heart failure drugs to those used in the major outcome trials. CRT non-responders should be assessed to try to identify a reason for this.

Dr McDonagh emphasised that integrating heart failure care and device care provides an opportunity for multiprofessional working. Many studies have shown that multiprofessional organisation of heart failure care improves patient outcomes, and data are now emerging that the same applies to device therapy. For example, US researchers have reported a successful multidisciplinary approach to the evaluation of patients who were not responding to CRT.[4]

The ideal way to integrate services in the UK would be to take advantage of the emerging heart failure management programmes. Electrophysiologists should be included in the model of multidisciplinary heart failure services, and patients referred for device therapy (CRT or ICD) should get the same access as other heart failure patients to proper diagnosis, appropriate investigation, a management plan plus long-term follow-up (Figure 1).

NICE guidance not being followed

Andrew Clark (Hull) said that guidance on CRT from the National Institute for Health and Clinical Excellence (NICE) is clearly not being followed. Around one-third of patients with heart failure due to LV systolic dysfunction have left bundle branch block (LBBB) and are potentially eligible for CRT. This equates to some 200,000 patients in the UK, but only around 3000 devices are currently being implanted each year.

He believed clinicians try to find reasons not to implant a CRT device; for example, that the patient is not sick enough, or has not got dyssynchrony on echocardiography. They should instead be looking for excuses to implant a device.

Echocardiographic measures of dyssynchrony were not the best way to select patients for CRT, Dr Clark said. They were poorly reproducible and not suitable for use in clinical practice. Patients should be selected on the basis of QRS duration. Most studies that demonstrated CRT benefit did not use echocardiographic criteria. Echocardiography was used in CARE-HF, but only for a small minority of patients.

Another obstacle to CRT use was the controversial issue of non-response. Many patients labelled as non-responders because of failure to improve may in fact be responding. Without CRT their heart failure might have deteriorated.

Dr Clark had reservations about the suggestion of NICE that CRT patients should have current or recent New York Heart Association (NYHA) functional class III or IV symptoms. NYHA was a crude instrument for trying to categorise patient symptoms; also, a new CARE-HF analysis indicated that severity of symptoms was not an important determinant of the prognostic effects of CRT.

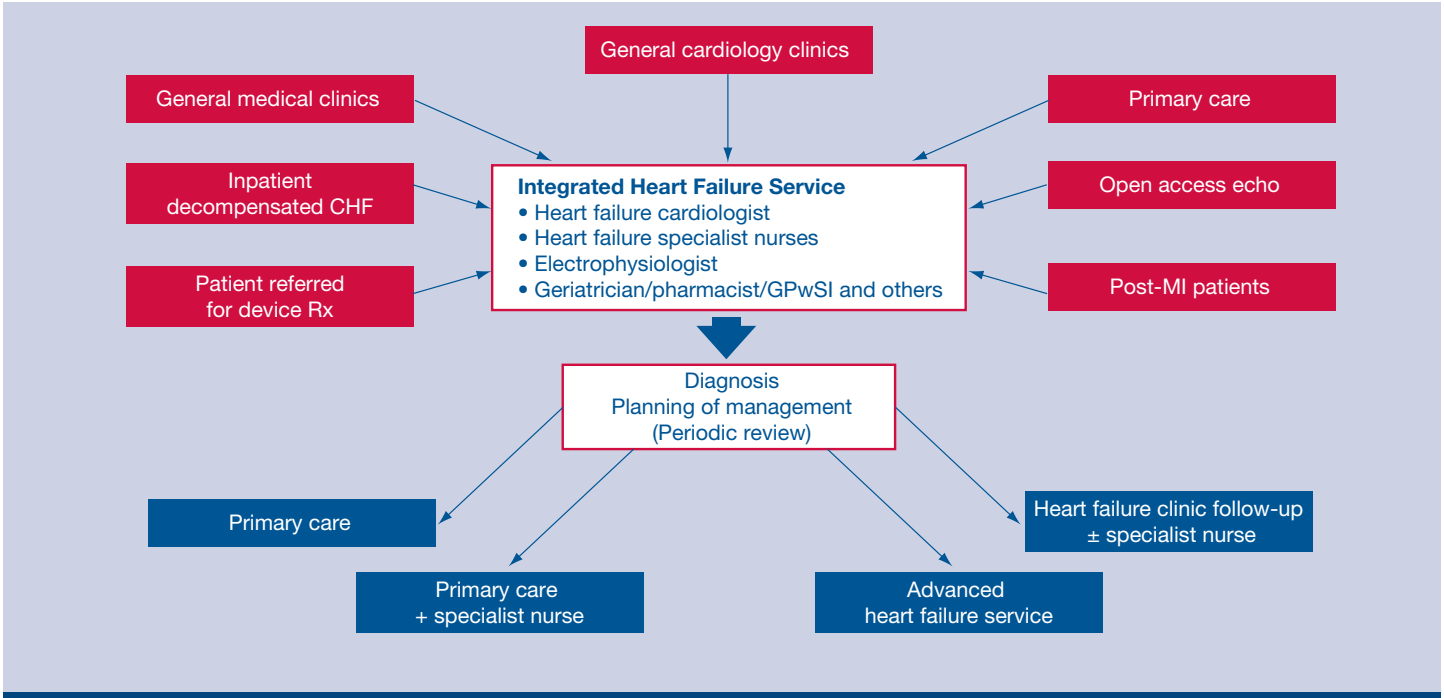


Figure 1. Patients needing device therapy should receive multidisciplinary heart failure care

He emphasised the importance of repeating the electrocardiogram (ECG) when reviewing heart failure patients to check whether LBBB has developed. "Rather than making a once-and-for-all judgement and saying this patient does not meet NICE criteria for CRT, we should be repeating the ECG at regular intervals, at least 6-monthly."

Underuse of devices

Speaking more generally about pacemakers and device therapy, Richard Charles (Liverpool) noted the underuse of pacemakers, ICDs and CRT, and the local inequity of the provision of device services in the UK.

The latest data from the Network Devices Survey Group show that the majority of cardiac networks are below the national target for ICD and the proposed CRT target.[1]

To achieve the Department of Health's target of parity with European implant rates by 2016, pacemaker use and the ICD implantation rate would have to increase by 10% and 35% per year, respectively. CRT implantation would need to maintain the current annual growth rate of 25% (Figure 2).

Why are patients not receiving device therapy? Dr Charles suggested there are multiple barriers, with blocks in the referral chain and low awareness of device indications. He recommended physician education programmes, screening programmes to actively seek the "at-risk" population and commissioner investment in this cost-effective technology.

Discussing device or lead malfunction, Michael Gammage (Birmingham) said that malfunction might occur because of a fault in construction, a design problem or poor implant technique leading to damage on insertion. Strategies were needed to deal with these failures. The risk to patients had to be identified: if action was needed, could the problem be resolved by a programming change or did it require formal intervention? Replacing a device carried its own risk, and lead replacement in particular should be undertaken only if absolutely necessary.

Chris Plummer (Newcastle) suggested that remote follow-up and remote monitoring is now the standard of care with devices. Patients like remote monitoring, and it allows continued delivery of a satisfactory devices service as implant rates increase. The value of this technology varies between patients: some will benefit from more intensive monitoring whereas others, because of geography or frailty, benefit from not coming to clinic so often.

He forecast a move towards a system of "comprehensive remote patient management" – with the ability to reprogramme a patient's device remotely. Clinicians aspired to this new level of patient care for selected patients.

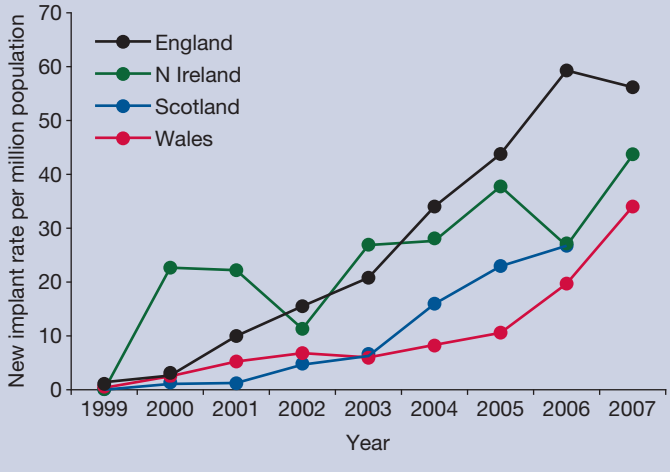


Figure 2. CRT implant rate: 25% annual increase needed to meet target of European parity by 2016[1]

Advanced heart failure: an evidence-based approach or a need for evidence?

Joint session with the British Cardiovascular Intervention Society and the British Society for Cardiovascular Research

Gross fluid retention is a common reason for admission to general medical wards or care of the elderly wards and is often not well managed, said Andrew Clark (Hull), speaking about the medical management of advanced heart failure.

An intravenous (IV) loop diuretic should be used to bypass the oedematous gut. Progressive nephron blockade, using a combination of loop and thiazide diuretics, was also a useful approach.

Ultrafiltration was likely to become important for patients with intractable fluid retention. The UNLOAD trial showed more rapid fluid loss than with IV diuretics. The results also suggested a potential longer-term clinical benefit (reduced 90-day rehospitalisation), but this needed confirmation.

In terms of optimising medical therapy, Dr Clark said there was a perception that many patients could not tolerate the standard heart failure medicines. Symptomatic hypotension and deteriorating renal function were often seen when a beta-blocker was added to ACE inhibitor therapy, and the patient might then be labelled as intolerant to beta-blockers. He thought it better for patients to take a low dose of both drugs than a high dose of one drug. “We should be trying to give beta-blockers to all patients, and trials have shown that these drugs can be tolerated even by very sick patients”, he said.

Renal dysfunction is a common complication in chronic heart failure. Dr Clark said there was evidence that adenosine-1 antagonists, a new group of drugs, might enhance the response to loop diuretics without worsening renal function. The recent ASTRAL trial found no benefit for renal artery angioplasty for non-heart failure patients with renal artery stenosis. A sub-study of this trial, including patients with chronic heart failure, has not yet reported.

Up to two-thirds of patients with chronic heart failure have anaemia. Treatment with erythropoietin (EPO) analogues and intravenous iron may have beneficial effects on exercise capacity and is currently being tested in large trials. The results of the small FERRIC-HF trial suggested that, for some patients, IV iron alone increases exercise capacity.

Heart failure drug therapy can certainly induce anaemia, Dr Clark said. His practice was not to stop the evidence-based therapy but he increasingly prescribed IV iron, despite limited evidence for this approach. He advised against using EPO and its analogues in the absence of trial evidence since patients with severe heart failure already had high endogenous EPO levels and this was an adverse prognostic indicator.

Revascularisation in heart failure

Mark de Belder (Middlesbrough) discussed evidence regarding the place of revascularisation. He said it was unclear whether post-MI revascularisation benefits LV function (i.e. whether an occluded vessel found after the acute event should be opened).

Trials comparing medical therapy with angioplasty had varying results. Some trials were neutral. However, the SWISSI-II trial reported better ventricular function at 4-year follow-up in angioplasty patients. SWISSI-II differed from the previous negative trials in that it only included patients with ischaemia (on stress imaging).

Dr de Belder therefore thought the message was that patients should undergo viability/ischaemia testing prior to revascularisation.

Which patients with ischaemic cardiomyopathy might benefit from revascularisation? Evidence was quite compelling that some heart failure patients with dysfunctional but viable (hibernating) myocardium have improved ventricular function after revascularisation. In the most recent study, around two-thirds of patients with viability improved ventricular function after bypass surgery.[5]

However, there was still a need to identify which patients would benefit and no consensus yet on management. Timing of revascularisation might be important. There was some evidence that patients with ischaemic cardiomyopathy and viable myocardium benefit from early revascularisation, perhaps because this could reverse adverse ventricle remodelling.

The STICH hypothesis 2 trial compared surgical ventricular reconstruction (to reduce LV volume) plus bypass surgery with bypass surgery alone and found no impact from the combined treatment on heart failure or mortality.[6] This suggests that surgeons should stop performing this operation, Dr de Belder said.

For cardiogenic shock, revascularisation should be carried out as early as possible. There was no clear evidence regarding additional treatments for these patients.

Dr de Belder also commented that the concept of ischaemic pre- or post-conditioning has a potentially important application in elective or emergency revascularisation to enhance myocardial recovery, but definitive randomised controlled trials are still needed. There is some evidence that ischaemic post-conditioning after angioplasty for acute MI reduces infarct size and is associated with better ejection fraction at 1 year.

Left ventricular assist devices

LV assist devices (LVADs) are mainly used to provide mechanical circulatory support as a bridge to transplantation, and there is also interest in use as a bridge to recovery.

Emma Birks (London) said that, in future, the devices would almost certainly be used as chronic support (destination therapy). There was no funding, as yet, in the UK for this.

For now, transplantation was still the gold standard for advanced heart failure. If patients survived the first year post-transplant they would survive an average of 13 years. However, numbers of transplants had been declining, mainly because of lack of donors – there were fewer than 100 adult heart transplants in the UK last year.

Survival of patients with implanted LVADs had improved, with European data showing 3-year survival of around 70%. “Once 5-year outcome starts to match transplantation we probably have a good alternative,” Dr Birks said.

As a bridge to transplantation, an LVAD could be lifesaving in deteriorating patients, and could improve secondary organ dysfunction for transplantation. Transplantation survival was comparable with or without prior LVAD use.

The bridge to recovery concept relates to use of an LVAD to rest the heart, leading to improved ventricular function and later explantation of the device. Dr Birks explained that the Harefield approach, now being tested in a multicentre US study, uses the LVAD as a platform for drug therapy. The rationale is that patients can tolerate high doses of heart failure drugs that induce reverse remodelling; the beta-2 agonist clenbuterol is also given to induce a physiological cardiac hypertrophy and strengthen the heart. This approach has involved patients with dilated cardiomyopathy.

External devices for short-term mechanical circulatory support might be used in critically ill patients when it is unclear whether the patient’s heart will recover or whether alternative, longer-term therapy will be needed.

Assessing LV function

Joint session with the British Society of Echocardiography, British Society of Cardiovascular Magnetic Resonance and the British Society of Cardiovascular Imaging

Setting the scene on LV assessment in chronic heart failure, Zaheer Yousef (Cardiff) said that it was essential to quantify the severity of a patient’s LV dysfunction – most commonly by measuring ejection fraction – and then to define and address the aetiology. Since 70–80% of heart failure in everyday practice was caused by ischaemic heart disease (IHD), assessment of LV function required detailed knowledge of coronary anatomy, viability and scar location, so that treatment strategies could be planned.

Decisions needed to be made on revascularisation and valve surgery, and the patient’s medical therapy must be optimised. Full assessment of LV function also required scrutiny of the abnormalities of the cardiac cycle timing – intra- and inter-ventricular and A-V dyssynchrony – for appropriate targeting of biventricular pacing.

Asked how he would investigate a patient with LV systolic dysfunction and IHD but no angina, Dr Yousef said that this was difficult but he would want to assess viability (ideally with CMR); if there was evidence of viability, he thought the patient should be offered revascularisation.

Discussion then moved on to two specific techniques: CMR imaging and echocardiography.

CMR imaging

Francisco Leyva (Birmingham) suggested that CMR imaging should be available to all cardiology departments.

An LV perfusion study, taking around 40 minutes, could give unparalleled quality of information on ventricular function, tissue status (necrotic, ischaemic, hibernating), disease aetiology and prognosis. There are also now data showing that late gadolinium enhancement can direct both revascularisation and device therapy.

A role for CMR imaging with late gadolinium enhancement in device therapy has emerged from studies showing that patients do not respond well to CRT if they have a scar in the posterolateral position. Dr Leyva said that there are now compelling data to show that deploying the LV lead over scarred myocardium over the posterolateral wall translates to a poor outcome from CRT, in terms of both symptoms and mortality/morbidity. Integration of CMR data on dyssynchrony, scar location and creatinine in the so-called DSC index gives a powerful indication of prognosis after CRT.

In addition, late gadolinium enhancement could also differentiate between dilated cardiomyopathy and ischaemic cardiomyopathy. CMR might, therefore, remove the need for invasive catheterisation.

Echocardiography

Navroz Masani (Cardiff) argued that echocardiography will have an important role in patients with heart failure for some time yet. Some people might regard it as yesterday’s technology, but this was far from the case. “We can use basic echo in an advanced manner, and, more importantly, we have useful new technologies,” he said.

Assessing regional wall motion was an example of advanced use of basic techniques, and among the exciting new technologies were 3D echo, which could help in measuring ejection fraction, and the measurement of long axis function. All patients with heart failure and impaired LV contraction should have an assessment of long axis function, Dr Masani said.

Rather than just doing a “quick echo” to look at LV systolic function, the technology should be used to make a complete structural and functional diagnosis, and to identify high-risk features, with this information then being used to guide and monitor management.

Emphasising that echocardiography and CMR are complementary, Dr Masani said that there was no question about the spectacular imaging of scarring with gadolinium CMR. But viability could also be assessed using dobutamine stress echocardiography: numerous papers had shown that this predicts recovery of function following revascularisation.

BSH EGM

At an Extraordinary General Meeting (EGM) of the BSH on 3 June the results of the election of a new Board were announced. The new BSH Board for June 2009–May 2011 is: Theresa McDonagh (Chair), Martin Cowie (Past-Chair), Suzanna Hardman (Chair-Elect), Andrew Clark (Deputy Chair), Iain Squire (Treasurer) and Jane Butler, Paul Kalra and Annie MacCallum (Councillors). Observers will be announced in due course.

Dr McDonagh formally thanked the outgoing Board Members and Observers: John Cleland (a founding board member), Jackie Austin, Peter Cowburn, Roy Gardner, Fiona Lough, Nigel Rowell and Jackie Taylor.

Dr McDonagh also announced that members had approved a Special Resolution to change the objectives of the Society. The new objectives are:

- to increase knowledge and promote research about the diagnosis, causes, management and consequences of heart failure amongst healthcare professionals, with the intention of delaying or preventing the onset of heart failure and improving care for patients with heart failure
- to provide expert advice to healthcare professionals, patient or government organisations, including the National Health Service, when appropriate and as requested.

Study acronyms

ASTRAL	Angioplasty and stenting for renal artery lesions
BEAUTIFUL	Morbidity–mortality evaluation of the If inhibitor ivabradine in patients with coronary disease and left ventricular dysfunction
CIBIS-ELD	Cardiac insufficiency bisoprolol study in elderly
COPERNICUS	Carvedilol prospective randomized cumulative survival
CARE-HF	Cardiac resynchronization – heart failure
CHARM	Candesartan in heart failure: assessment of reduction in mortality and morbidity
COMPANION	Comparison of medical therapy, pacing and defibrillation in chronic heart failure
FERRIC-HF	Ferric iron sucrose in heart failure
HOME-HF	Evaluation of patients with heart failure using home telemonitoring
SAVE	Survival and ventricular enlargement
SWISSI-II	Swiss interventional study on silent ischemia type II
STICH	Surgical treatments for ischemic heart failure
UNLOAD	Ultrafiltration versus intravenous diuretics for patients hospitalized for acute decompensated congestive heart failure

References

1. Network Devices Survey Group. Heart Rhythm Devices: UK national survey 2007 (www.devicesurvey.com).
2. Dar O, Riley J, Chapman C et al. A randomized trial of home telemonitoring in a typical elderly heart failure population in North West London: results of the Home-HF study. *Eur J Heart Fail* 2009; 11:319–25.
3. Wilkstrom G, Blomstrom-Lundqvist C, Andren B et al. The effects of aetiology on outcome in patients treated with cardiac resynchronization therapy in the CARE-HF trial. *Eur Heart J* 2009; 30:782–8.
4. Mullens W, Grimm RA, Verga T et al. Insights from a cardiac resynchronization optimization clinic as part of a heart failure disease management program. *J Am Coll Cardiol* 2009;53:765–73.
5. Rizzello V, Poldermans D, Biagini E et al. Prognosis of patients with ischemic cardiomyopathy after coronary revascularization: relation to viability and improvement in LVEF. *Heart* 2009;95:1273–7.
6. Jones RH, Velazquez EJ, Michler RE et al. Coronary bypass surgery with or without surgical ventricular reconstruction. *N Engl J Med* 2009;360:1705–17.

Becoming a Member or a Friend of the BSH

Membership is open to anyone involved in the diagnosis, management or science of HF. If you are interested in becoming a Member or Friend of the BSH, please contact:

Rose-Marie Wilkinson/Michelle Glanville
BSH Secretariat
'Nought' The Farthings, Marcham,
Oxfordshire OX13 6QD
Telephone: 01865 391836
Email: info@bsh.org.uk Website: www.bsh.org.uk

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