Position on Heart Failure with Preserved Ejection Fraction (HFpEF) – May 2022

Heart failure with preserved ejection fraction (HFpEF) is an increasingly recognised form of heart failure that has been described as an emerging epidemic. It presents many challenges to patients, healthcare services, and population health. The BSH HFpEF working group has produced this statement with the aims of increasing awareness of this syndrome, highlighting areas of uncertainty, and to promote discussion regarding measures that can support effective HFpEF diagnosis and care.

Prevalence

Among patients with a diagnosis of heart failure (HF), it is reported that up to 40 to 50% may have HFpEF.[1] HFpEF also accounts for an increasing proportion of HF-related hospitalisations.[2] There is a strong association between HFpEF, older age, and cardiovascular and non-cardiovascular comorbidities. **As life expectancy and comorbidity rates rise, the proportion of HF patients with HFpEF and resulting impact of HFpEF on healthcare services is projected to increase.**

Clinical presentation

Patients with HFpEF experience similar symptoms and signs to patients with HF with reduced ejection fraction (HFrEF), including breathlessness, fatigue, ankle swelling, and reduced quality of life. Some patients with HFpEF may not have symptoms at rest but develop moderate or severely limiting symptoms during exercise. It can be difficult to detect HFpEF in individuals who are obese or have co-existing cardiac and non-cardiac comorbidities with overlapping symptoms, including atrial fibrillation, COPD, and renal failure. **Since patients with HFpEF may present to different healthcare settings, all healthcare providers play a critical role in recognising patients with or at risk of HFpEF.**

Diagnosis

Diagnosis of HFpEF currently requires consideration of multiple criteria, including symptoms and signs of heart failure, a left ventricular ejection fraction ≥50%, raised natriuretic peptides, and objective evidence of cardiac structural and functional alterations consistent with HF.[3] It is necessary to exclude other conditions that mimic HFpEF, such as cardiac amyloidosis or hypertrophic cardiomyopathy, and additional specialist tests, such as exercise echocardiography or cardiac catheterisation, may be needed to confirm HFpEF in equivocal cases. Normal levels of natriuretic peptides do not necessarily exclude a diagnosis of HFpEF, for example in patients with obesity and symptoms and signs of HF; however, further objective measures of cardiac dysfunction should be sought in these patients to improve diagnostic specificity. Equally, it is recognised that natriuretic peptides may be elevated due to conditions other than HF. **In order to achieve a timely and accurate diagnosis, the BSH working group proposes that all patients with suspected HFpEF (based on the presence of symptoms or signs of HF, elevated natriuretic peptide levels, and objective evidence of abnormal cardiac structure or function), should be referred to an appropriate specialist for evaluation.**

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Cardiac Amyloidosis

A distinct cardiomyopathy that presents with the clinical syndrome of HFpEF is caused by cardiac amyloidosis. Transthyretin cardiac amyloid (ATTR) is increasingly detected due to better access to advanced imaging and should be suspected, particularly in patients who have had TAVI treatment for aortic stenosis and HF patients with African or Afro-Caribbean heritage. It is important that patients with HFpEF from at risk groups have access to the appropriate investigations when required, such as strain echocardiography imaging, cardiovascular magnetic resonance (CMR) or nuclear medicine DPD scanning (in line with the BSH's Inclusion, Equality and Respect Charter). There are disease specific treatments for ATTR cardiomyopathy, and further treatments are at advanced stages of development. The BSH is working with patients and the HF charities to work towards access to these treatments in the UK.

Treatment

For patients with confirmed HFpEF, the main goals of treatment are to reduce HF symptoms, increase functional status, and reduce the risk of hospitalisation. At present, there is no clear evidence that pharmacological therapy, diet, or other treatments reduce the risk of mortality in patients with HFpEF. However, as for other types of HF, early recognition and treatment of fluid overload improves symptoms and may prevent a requirement for hospitalisation. Conditions commonly associated with HFpEF include hypertension, atrial fibrillation, coronary artery disease, diabetes, COPD, chronic kidney disease, anaemia, and sleep-disordered breathing. Screening for and treatment of these comorbidities is particularly relevant in HFpEF where the comorbidity burden is often high and drives additional healthcare needs and non-HF related hospitalisations.

Organisation of care

Specialist care can make an important difference in the lives of many patients with HFpEF. Organisation of HFpEF care requires consideration of the local population, resources, and existing care pathways. As a minimum, all patients with confirmed HFpEF should have access to a multidisciplinary HF team and appropriate non-HF specialists to define goals for comorbidity management. Community Heart Failure Specialist Nurses (HFSN) can provide invaluable support and education to patients after a HF diagnosis. To date, HFSN input has been shown to be effective for optimising treatment regimens and reducing recurrent hospitalisation in patients with HFrEF.[4, 5] This is less well studied in HFpEF and has resulted in variable access to and funding for HFpEF care by community HFSN teams across the country. Importantly, however, some patients with HFpEF have repeated hospital admissions and both NICE and the national HF audit recommend that all patients admitted to hospital with a primary diagnosis of HF should have specialist follow-up within 2 weeks.[2, 6] The GIRFT report recommended a minimum of 3 to 4 whole-time equivalent community HFSN/advanced healthcare practitioners per 100,000 population,[7] which is supported by the BSH.[8] **Therefore, to reduce existing inequities and achieve quality standards for HF care, including HFpEF, significant investment is needed to enable workforce expansion, training, and greater resource provision, including widespread access to natriuretic peptide testing and echocardiography in primary care.**

Looking forward

As our understanding of HFpEF continues to evolve, so will our approach to diagnosis and treatment. For example, the sodium-glucose cotransporter-2 inhibitors (SGLT2i) have recently emerged as a promising therapy to reduce HF-related hospitalisations in HFpEF.[9] Enrolment of patients in clinical research studies and registries will be important for continued progress. Studies are also needed to clarify which patients with HFpEF will benefit from community HFSN-led care as well as pragmatic models of implementing HFpEF care. Looking forward, the BSH HFpEF working group supports ongoing development of integrated and remote strategies for managing HFpEF that may help to optimise healthcare efficiency, broaden access, and contribute to an improved overall experience for patients living with HFpEF.

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