Impact on Patient Care: The 2016 European Heart Failure Guidelines

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In this issue of *European Cardiology Review*, Professor Bayes Genis and team give a clear and robust review of the 2016 European Society of Cardiology guidelines for the diagnosis and treatment of acute and chronic heart failure (HF).¹ The guidelines were last updated in 2012 and combined for the first time chronic and acute care. One year on, and in the wake of the 2017 HF Association conference in Paris, it is a good time to reflect on the impact that the guidelines have had on patient care.

There are three key components of the guidelines that will unquestionably have a major impact on patient care and outcomes. The first is in the area of therapeutics. We know that new therapies breed hope and optimism and this was certainly the case with the introduction of LCZ696, otherwise known as sacubitril/valsartan (Entresto; Novartis). Following the pivotal PARADIGM-HF study, this was the first in the class of angiotensin receptor neprilysin inhibitors and was shown to be superior to the angiotensin-converting-enzyme inhibitor (ACEI), enalapril, reducing cardiovascular death or hospitalisation for HF by 20% and all-cause mortality by 16 % to a high statistical significance ($p=0.0000004$).² This effect was seen in patients with HF and reduced ejection fraction and mild-to-moderate symptoms. Consequently, there had been calls for the drug to replace existing ACEIs in all HF patients. However, the guideline committee have taken a more evidenced-based stance and have given class 1B recommendations that the requirement for previous exposure to ACEI or angiotensin receptor blocker is required prior to considering switching symptomatic (>New York Heart Association class II) patients to sacubitril/valsartan, as per the study inclusion criteria.

Despite this, 1 year on, uptake seems slow in the UK. Notwithstanding the financial impact that converting patients to sacubitril/valsartan will have, we have yet to fully understand the safety profile in ACE-inhibitor naïve patients. Moreover, sacubitril/valsartan is subject to two post-marketing surveillance studies as requested by the US Food and Drug Administration. One is to evaluate the effects of sacubitril/valsartan compared with valsartan on cognitive function, since neprilysin is a major beta amyloid-degrading enzyme in the brain; and the second study is to evaluate the incidence of angioedema in black patients treated with sacubitril/valsartan compared with a control drug. Until adequate data are available, sacubitril/valsartan cannot be recommended in a broader group of patients.

Another notable feature of the guidelines is the prominence now given to the important issue of comorbidities and their co-management in HF patients. Comorbidities often accompany HF, with increasing prevalence as patients get older. Specific reference has been given in the guidelines to the holistic management of patients with both physical and psychological conditions. Comorbidities are known to independently predict death in patients with HF. Therefore, to focus on their management in the current guidelines will invariably have an impact on prognosis. For example, in those patients with concomitant HF with reduced ejection fraction and iron deficiency, replacement therapy with intravenous ferric carboxymaltose has been shown to reduce HF hospitalization and improve exercise capacity.³ This focus on comorbidities will also likely promote collaborative thinking and engender new models of multidisciplinary care, such as joint HF–renal clinics, which can only be a positive thing.

Lastly, the acute HF section of the guidelines builds on the 2015 consensus paper from the Heart Failure Association/European Society of Emergency Medicine and the Society of Academic Emergency Medicine⁴ and importantly emphasise the concept of 'time is muscle', borrowed from patients with acute coronary syndrome. The algorithm emphasises urgent diagnosis and treatment of patients with acute HF so as to prevent organ damage. Such emphasis, at an earlier stage in the patient journey, could prevent much morbidity and mortality through timely diagnosis and coordinated disease management. The guidelines reiterate the importance of early level 2 high-dependency involvement in these high-risk patients presenting with acute pulmonary oedema. We also know HF patients treated in cardiology wards are less likely to die, either in hospital or after discharge from hospital, compared with patients treated in non-specialist wards. The hope is that the guidelines will enable clinicians to approach policy makers at local and national levels to introduce innovative models of care in the acute setting, such as acute HF units, thus enabling close collaboration between multidisciplinary healthcare professionals. This will help ensure that every patient is cared for in the optimal manner within hospital and community settings.

The 2016 European HF guidelines have provided important evidence-based solutions; however, it is also clear that adherence to guidelines varies between settings, contributing to disparities in care and outcomes for patients. The challenge will be to overcome such inequalities and improve outcomes for all HF patients. ■

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