

## LETTERS

## Missed Opportunities for Advance Care Planning

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*To the Editors:*—We read with interest the article by Ahluwalia et al.<sup>1</sup> We agree about the importance of non-cardiac comorbidities in the prognosis of heart failure (HF), as well as in patients hospitalized for decompensated HF. The Registro Nacional de Insuficiencia Cardiaca (RICA) registry is a nationwide, multicenter, prospective cohort study, supported by the Spanish Society of Internal Medicine. It includes patients consecutively admitted to the Internal Medicine units with acute decompensation of HF (their characteristics are described elsewhere<sup>2</sup>). Patients included in this Registry reflect everyday clinical practice, since there are no restrictions on patient inclusion other than unwillingness to participate.

Since March 2008, we have had a complete data set based on 734 patients [mean age 77.2 years ( $\pm 8.6$ ); 46/54 % males/females]. Sixty-two had HF with preserved EF (HFpEF) (cutoff value for EF: 45 %). Comorbidities are present in more than half of the cohort, the most frequent being diabetes mellitus (46 %), hyperlipidemia (43 %), chronic obstructive pulmonary disease (28 %), chronic kidney disease (26 %), ischemic heart disease (23 %), peripheral artery disease (16 %), stroke (14 %), peptic ulcer (12 %), liver disease (8 %), dementia (5 %), connective tissue diseases (5 %), leukemia or lymphoma (2 %), and AIDS (0.5 %). The Charlson Index—an expression of comorbidity burden—is 3.65 in the entire cohort. Patients with HFpEF have 3.34 points, whereas HFrEF patients have 4.15 points ( $p < 0.05$ ).

HFrEF patients more frequently have antecedents of ischemic heart disease, chronic kidney disease or peripheral artery disease, while those with HFpEF are more likely to

be hypertensive and have atrial fibrillation ( $p < 0.05$  in all cases). Despite this diverse clinical profile, our patients showed no differences in functional class (NYHA) or outcomes regarding EF status. However, a Charlson Index score above or below 3 points helped predict differences in prognosis [cardiovascular mortality 21 vs 34 %  $p < 0.05$ ; and cardiovascular mortality plus readmissions 38 vs 53 % ( $p < 0.05$ ), for an index below or above 3 points, respectively]. The Charlson Index, rather than a count of conditions, may be an easy and reproducible tool to estimate the burden of comorbidities among HF patients.

Comorbidities are likely to be a marker of reduced reserve capacity not only in the cardiovascular system, but also in multiple organ systems.<sup>3</sup> Awareness of the importance of the comorbidities underlying HFpEF may be crucial for therapeutic success.<sup>4</sup> Nonetheless, we believe that comorbidities are important irrespective of the type of HF and must be addressed with the same strategies and energy no matter what the status of EF.

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