Characteristics and health status of patients with and without confirmed HFpEF

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Aims: Patients with heart failure with preserved ejection fraction (HFpEF) are usually older and multi-morbid and diagnosis can be challenging. The aims of this cohort study were to confirm diagnosis of HFpEF in patients with possible HFpEF recruited from primary care, to compare characteristics and health status between those with and without HFpEF, and to determine factors associated with health status in patients with HFpEF.

Methods: Patients with presumed HFpEF were recruited from primary care practices and underwent clinical assessment and diagnostic evaluation as part of a longitudinal cohort study. Health status was measured by Montreal Cognitive Assessment (MOCA), 6-minute walk test, symptoms, and the Kansas City Cardiomyopathy Questionnaire (KCCQ), and quality of life (QoL) by EQ-5D-5L visual analogue scale (VAS).

Results: 151 patients (mean age 78.5±8.6 years, 40% women, mean EF 56% + 9.4) were recruited and 93 (61.6%) were confirmed HFpEF (those without HFpEF had other HF and cardiac diagnoses). Patients with and without HFpEF did not differ by age, MOCA, blood pressure, heart rate, NYHA class, proportion with atrial fibrillation, Charlson Comorbidity Index, or NT-ProBNP levels. Patients with HFpEF were more likely to be women, overweight or obese, frail, and to be more functionally impaired by 6 minute walk distance and gait speed than those without. Although not statistically significant, patients with HFpEF had clinically significant differences (>5 points) on the physical limitations, symptom burden and clinical summary subscales of the KCCQ, but did not differ by other subscales or by EQ-5D-5L VAS (70±17 vs 73±19, p=0.385). More patients with HFpEF reported daytime dyspnoea (63% vs 46%, p=0.035) and fatigue (81% vs 61%, p=0.008), but not other symptoms compared to those without HFpEF. For both groups BMI was moderately negatively correlated with KCCQ subscale scores, and 6 minute walk distance was positively correlated with KCCQ subscales.

Conclusions: Nearly 40% were not confirmed as HFpEF indicating the challenges of diagnosis. Patients with confirmed HFpEF differed by sex, overweight/obesity, frailty, functional impairment, and symptoms but not by age or comorbidities from those without HFpEF. These differences were reflected in some subscale scores of the KCCQ, but not how patients reported their quality of life on the KCCQ QoL subscale and EQ-5D-5L VAS. Older patients with HFpEF reported relatively high QoL despite poor health status by functional impairment, frailty and symptoms.