**RACIAL DIFFERENCES IN CLINICAL CHARACTERISTICS OF HEART FAILURE WITH PRESERVED EJECTION FRACTION**

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*Background*: Studies suggest that African-American patients have a higher prevalence of heart failure with preserved ejection fraction (HFpEF) than white patients. However, studies describing the clinical characteristics of HFpEF are drawn from predominantly white cohorts.

*Objective*: To examine clinical characteristics of white and African-American veterans diagnosed with HFpEF.

*Methods and Results*: We identified all patients diagnosed with heart failure (HF) between 2002 and 2014 from the national Veterans Affairs database. All recorded values of ejection fraction (EF) were extracted using a Natural Language Processing tool. HFpEF was defined as: EF≥50% with the presence of signs, symptoms, and HF specific treatment. Amongst 91,139 HFpEF patients, 14% were African-American and 96% were men. African-American patients were younger, had higher blood pressure and heart rate, were more likely to have hypertension, type 2 diabetes, chronic kidney and liver disease, and cerebrovascular disease, and were more likely to be prescribed renin-angiotensin antagonists, beta blockers, and calcium channel blockers at the time of HFpEF diagnosis (Table 1).

*Conclusion*: Our results describe the characteristics of veterans with HFpEF and suggest that African-American patients have a higher prevalence of comorbidities that may be potential targets for the prevention and treatment of HFpEF in African-Americans.

Table1. Racial differences in baseline characteristics around the time of diagnosis of heart failure with preserved ejection fraction in a large national veterans affairs database

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| --- | --- | --- | --- |
| **Baseline characteristics** | **White (N=78,604)** | **African-American (N=12,535)** | **P-value** |
| Age | 73.3 (11.0) | 68.3 (12.3) | <0.0001 |
| Males (%) | 96.6 | 95.4 | <0.0001 |
| Body Mass Index (BMI) | 32.2 (8.1) | 32.3 (8.6) | 0.5141 |
| Systolic blood pressure | 136.3 (22.9) | 145.2 (26.7) | <0.0001 |
| Diastolic blood pressure | 72.2 (12.7) | 78.3 (15.1) | <0.0001 |
| Heart Rate | 76.95 (16.9) | 78.95 (16.7) | <0.0001 |
| EF (%), median (range) | 60 (50-100) | 60 (50-95) | 0.003 |
| Hypertension | 90.4 | 94.4 | <0.0001 |
| Hyperlipidemia | 73.1 | 64.9 | <0.0001 |
| Type 2 Diabetes | 58.2 | 65.1 | <0.0001 |
| Atrial fibrillation | 31.4 | 14.7 | <0.0001 |
| Coronary artery disease | 52.9 | 38.5 | <0.0001 |
| Chronic kidney disease | 28.2 | 41.9 | <0.0001 |
| Chronic liver disease | 6.5 | 7.3 | 0.0011 |
| Chronic obstructive pulmonary disease | 54.4 | 46.3 | <0.0001 |
| Stroke/TIA | 6.2 | 7.5 | <0.0001 |
| Serum sodium | 138.5 (4.1) | 139.3 (3.9) | <0.0001 |
| Serum creatinine | 1.4 (0.8) | 1.8 (1.6) | <0.0001 |
| ACE or ARB prescription | 55.3 | 61.1 | <0.0001 |
| Beta blockers prescription | 58.2 | 60.5 | <0.0001 |
| Calcium channel blockers prescription | 32.9 | 46.6 | <0.0001 |

\*Values reported are mean (SD) for continuous variables