**Characteristics of symptom burden in atrial fibrillation with concomitant heart failure**

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**Introduction**: Symptom burden is an important factor in determining the treatment of atrial fibrillation (AF). AF is frequently accompanied by heart failure (HF). This study investigated the characteristics of AF symptoms with concomitant HF.

**Methods**: A total of 4,885 patients with AF were consecutively enrolled through a prospective observational registry (the Comparison Study of Drugs for Symptom Control and Complication Prevention of Atrial Fibrillation [CODE-AF] registry). Clinically diagnosed HF was divided into 3 categories (preserved, mid-range, and reduced ejection fraction [EF]). Symptom severity was assessed using the European Heart Rhythm Association (EHRA) classification.

**Result**: The presence of AF-related symptoms was comparable irrespective of concomitant HF. Patients with HF with reduced EF demonstrated severe (EHRA class 3 and 4) and atypical symptoms. HF with preserved EF was also associated with atypical symptoms. Female sex and AF type were associated with the presence of symptoms in AF without HF, and non-maintenance of sinus rhythm and increased left atrial pressure (E/e' ≥15) were factors related to the presence of symptoms in AF with HF.

**Conclusion**: AF with concomitant HF presented with more severe and atypical symptoms than AF without HF. Maintaining the sinus rhythm and reducing the E/e’ ratio are important factors for reducing symptoms in AF with concomitant HF.