

## Baseline clinical features in a large-scale registration survey of patient with hypertrophic cardiomyopathy throughout Japan: J-HCM registry study

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**Background:** Hypertrophic cardiomyopathy (HCM) is a most prevalent primary myocardial disorder with heterogeneous clinical features. However, there have been few studies on clinical features of HCM as a prospective cohort. In 2015, we established a large-scale registration survey of patients with HCM throughout Japan, named J-HCM registry study.

**Purpose:** The aim of this study was to clarify the clinical features of Japanese patients with HCM.

**Methods:** J-HCM registry study is a prospective, multicenter investigation, consisting of 24 hospitals. This time, we present the baseline clinical characteristics in this survey.

**Results:** Total 1484 patients were registered. The ages at registration and at diagnosis were  $65 \pm 15$  and  $56 \pm 17$  years, respectively, and 806 patients (54%) were men. Majority of the patients (95%) was NYHA class I or II. With regard to subtypes of HCM, there were 526 patients (36%) in the HCM with left ventricular (LV) outflow tract obstruction, 126 patients (8%) in the mid-ventricular obstruction, 57 patients (4%) in the end-stage phase characterized by LV ejection fraction  $< 50\%$ , and 197 patients (14%) in aperi-

cal HCM. At registration, 80 patients (6%) had prior successful recovery from sustained ventricular tachycardia or ventricular fibrillation, 162 patients (11%) suffered from heart failure hospitalization, and 64 patients (4%) had history of embolic event. Regarding invasive treatment, 160 patients (10%) had prior septal reduction therapy and 162 patients (11%) had ICD implantation. According to the 2014 European Society of Cardiology Guidelines on sudden cardiac death (SCD) prevention, the study patients were divided into 3 categories by the HCM Risk-SCD calculator: patients distribution, 4% in the high risk group ( $\geq 6\%$  calculated HCM Risk-SCD at 5 years), 7% in the intermediate risk group ( $4\%$  to  $< 6\%$ ), 69% in the low risk group ( $< 4\%$ ), and 16% in the patients with extreme characteristics (Figure 1).

**Conclusions:** In this multicenter registration survey of patients with HCM, the baseline clinical characteristics were almost similar to several retrospective large-scale cohorts in Western countries except older age and less symptomatic state. This study will provide important knowledge regarding management of HCM.

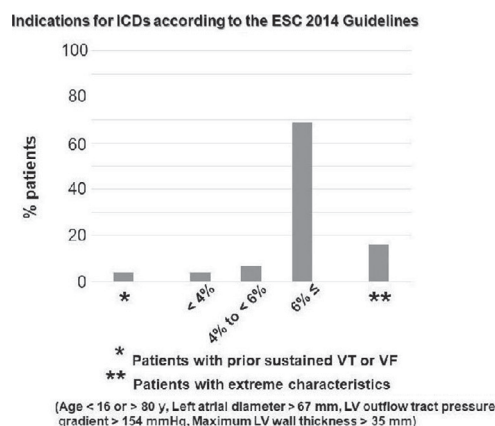


Figure 1