The Association of Age and Gender with the Mechanism of Paroxysmal Supraventricular Tachycardia in Japan

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Objectives: The objective of this study was to determine the impact of age and gender on the mechanism of paroxysmal supraventricular tachycardia (PSVT) in Japan. Background: Although previous studies have indicated the association between PSVT mechanism and both age and gender, contemporary data are limited in Japanese patients. Methods: We reviewed 609 patients referred to our institution as a diagnosis of PSVT on electrocardiogram for catheter ablation between 2001 and 2011. The mechanism was classified as atrioventricular reentrant tachycardia (AVRT), atrioventricular nodal reentrant tachycardia (AVNRT), or atrial tachycardia (AT). Results: The mean age was 48 +/- 18 years, and men accounted for 52% of all. AVRT was the predominant mechanism (n = 281 [46.1%]), followed by AVNRT (n = 283 [46.5%]) and AT (n = 45 [7.4%]). The majority of patients with AVRT were men (183/283 [64.7%]), whereas the majority of patients with AVNRT and AT were women (168/281 [59.8%] and 25/45 [55.6%], respectively). AVRT has bimodal peaks at 30s and 50s. Patients with AT increased sharply between 50s and 70s (75.6%). Patients with AVNRT increased gradually until 60s. Conclusions: The mechanism of PSVT in Japanese patients presenting for ablation had a significant association with both age and gender. Keywords: PSVT, age, gender