



ACC.14

TCT@ACC-12 | innovation in intervention

A429

JACC April 1, 2014

Volume 63, Issue 12

 **Arrhythmias and Clinical EP****AGE AND GENDER-RELATED SYMPTOMS RECURRENCE AFTER AV NODE RE-ENTRANT TACHYCARDIA**

Poster Contributions

Hall C

Sunday, March 30, 2014, 3:45 p.m.-4:30 p.m.

Session Title: Arrhythmias and Clinical EP: New Observations Affecting Clinical Management

Abstract Category: 4. Arrhythmias and Clinical EP: AF/SVT

Presentation Number: 1217-116

Authors: *Beatrice Brembilla-Perrot, Jean Marc Sellal, Arnaud Olivier, Julie Vincent, Sarah Dorlet, Vladimir Manenti, Etienne Aliot, Christian de Chillou, Daniel Beurrier, Anne Moulin-Zinsch, Cardiology, CHU of Brabois, Vandoeuvre Les Nancy, France*

Background: Slow pathway radiofrequency (RF) ablation currently is used to treat patients with atrioventricular nodal re-entrant tachycardia (AVNRT). The aim of study was to evaluate the factors explaining the recurrence of symptoms after AVNRT ablation.

Methods: 881 patients 291 males, 590 females, mean age 52±18 years, were admitted for ablation of typical (n=793) or atypical AVNRT (n=88). AVNRT was induced in control state or after isoproterenol. Ablation used RF energy, 65°, 40watts, delivered on slow pathway potential, until that AVNRT was not induced after 20 minutes following application.

Results: 90 patients were excluded because AVNRT remained inducible or ablation was stopped for atrial fibrillation/tachycardia (AF)(n=30). Success was obtained in 791 patients. During follow-up (mean 2.5±2 years), 128 patients (16%) had recurrence of symptoms. After noninvasive studies and another electrophysiological study, symptoms were attributed to another tachycardia (n=51)(6%)(group I)(AF/atrial flutter 48, ventricular tachycardia 3), a true recurrence of AVNRT (n=39)(5%)(group II) or a sinus tachycardia (n=38)(5%)(group III); 663 patients were asymptomatic (84%)(group IV). Group I patients were older (60±13 years) than group II (53±20), III (34±16), IV (52±18)(p<0.001), less frequently females (49%) than group II (61.5%), III (84%) or IV (67%)(p<0.01) and had more frequently atypical AVNRT (16%) than group II (10%), III (5%) or IV (6%)(p<0.006). All clinical and electrophysiological of group II and IV were similar except the number of RF applications higher in group II (17±17) than in group IV (10±9). Group III differs from other groups by its younger age (p<0.0001) and the higher frequency of females (p<0.02). Associated syncope and need of isoproterenol to induce AVNRT did not differ significantly between each group.

Conclusions: Recurrence of symptoms after successful AVNRT ablation is relatively frequent (16%), but true recurrence of AVNRT is only present in 5% of patients. Old patients of male gender generally presented another tachycardia, mainly atrial fibrillation. The youngest patients, mainly females, usually had no organic tachycardia but a sinus tachycardia.