A STUDY ON THE OPPORTUNITY FOR PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA TREATMENT WITH RADIOFREQUENCY CATHETER ABLATION: AN INSIGHT FROM OLDER PATIENTS WITH PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA

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Background Although Radiofrequency catheter ablation (RFCA) treatment for patients with paroxysmal supraventricular tachycardia (PSVT) has been proven to be an effective therapy, many patients, especially the older people, often refuse to undergo the procedure until they suffer serious side effects from PSVT. We want to discuss the opportunity for PSVT treatment with RFCA based on our experiences.

Methods Retrospective chart review was done on all patients who underwent RFCA for PSVT in Peking University First Hospital, Beijing, China, from January 1, 2006 to December 31, 2010. Patients were divided into two groups based on their age (less than 60 years old or 60 years old and older). A statistical analysis was conducted between Group 1 (<60 years) and group 2 (≥60 years).

Results Total of 293 patients were reviewed with 231 patients in group 1 and 62 patients in group 2. The mean (±SD) ventricular rate during PSVT attack was 193.40±35.44 bpm in group 1 and 171.71±26.31 bpm in group 2 (t=4.10, p<0.001). During the sinus rhythm, the mean ejection fraction (Teich method) was 0.70±0.35 in group 1 and 0.70±0.08 in group 2 (t=−0.03, p>0.05), and the E/A peak value ratio was 1.27±0.48 in group 1 and 1.18±0.50 in group 2 (t=−0.05, p>0.05). The comorbid cardiovascular conditions were 0.43±0.75 in group 1 and 1.19±1.04 in group 2 (t=−5.45, p<0.001). 25 patients in group 1 and 17 patients in group 2 received RFCA treatment due to serious cardiovascular complications induced by PSVT. The percentages were 10.82% and 27.42%, respectively (χ^2=10.97, p<0.001).

Conclusion Patients with PSVT, especially older patients, should receive RFCA treatment early when PSVT is proven.