Shortening of fast pathway effective refractory period post successful ablation of atrioventricular nodal re-entrant tachycardia

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Introduction: Atrioventricular nodal re-entrant tachycardia (AVNRT) is the most common supraventricular tachycardia (SVT). Catheter ablation is the preferred therapeutic strategy for this arrhythmia with high successful rate. The purpose of this study is to report the clinical and electrophysiological characteristics of our AVNRT ablation.

Methods: This was an analytic observational study with a cross sectional design. Sample was obtained by medical record review study which fulfilled the inclusion and exclusion criteria. Subject who were included were those with AVNRT induced by extra stimulus pacing, while those requiring study drug were excluded. Data was shown as numerical value (mean±SD) and tested using either Pearson’s or Spearman’s test with P value of ≤ 0.05.

Result: During the period of January – December 2018, we collected data from 63 patients. Majority of patients were female (76.19%), the mean age was 44.2 ± 15.1 years old. The successful rate of typical AVNRT ablation was 97.5%. Interestingly, we found a shortening of the effective refractory period (ERP) of the AVN fast pathway (FP) post slow pathway ablation (pre-ablation: 340.48 ± 64.97 ms; post ablation: 269.84 ± 51.54 ms, p<0.05).

Conclusion: We found a shortening of the ERP of the AVN fast pathway post slow pathway ablation. Whether this phenomenon is related to the success rate of the ablation need further studies.