16-months result from Radiofrequency ablation of Right Ventricular Outflow Tract Premature Ventricular Contractions in National Cardiovascular Centre Harapan Kita, Indonesia.

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Introduction: Premature ventricular contractions (PVC) deriving from right ventricular outflow tract (RVOT) ablation has becoming a curative treatment as compared to medical therapy alone in symptomatic patient. Ablation of RVOT PVC does confer high successful rate.

Methods: We analyzed data from ablation registry in National Cardiovascular Centre Harapan Kita, Indonesia starting from 1st January 2018 to 30th April 2019 with the initial diagnosis of RVOT PVC based on ECG. 100 patients were screened, 10 were excluded due to incomplete data and inaccurate diagnosis. This patient undergone conventional radio-frequency ablation (RFA) of RVOT PVC. We assessed successful location of ablation, outcome and recurrence.

Result: Out of 90 patients, female predominates with 65 patients (72.2%), compared to men 25 (27.8%). Distribution of age undergone RFA were in the range of 40-49 and 50-59 years (28.9% and 27.8% respectively) while the youngest patient aged 17 years and oldest patient at 68 years. Most common site for RVOT ablation was at anteroseptal RVOT with 48 patients (53.4%), while posteroseptal region in 12 patients (13.3%). Uncommon site of ablation was left ventricular (LV) summit, left coronary cusp (LCC) and right coronary cusp (RCC). We found that 75 patients (83.3%) were successfully ablated, while 8 patients (8.9%) failed and 7 patients (7.8%) had partial success. Failed ablation came from 2 patients with anteroseptal, 2 posterior, each one from free wall and LV summit, while another 2 were undefined RVOT area. From successful ablation group, 67 patients (89.3%) had no recurrence, 8 patients (8%) immediate, and 2 patients (2.7%) delayed.

Conclusion: From our data, RVOT PVC commonly attributed to anteroseptal region, predominant in female and largely comprised of middle age group. Conventional RFA of RVOT still conferred good successful rate with low recurrence. It could still be first option ablation modality as opposed to 3D ablation due to cost, feasibility and availability.