Premature Ventricular Contraction Originating from Posteroseptum

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Introduction: Idiopathic premature ventricular contractions (PVCs) mainly have an outflow tract origin. The PVC originating from posteroseptum (PS) is very uncommon. Results: We describe the case of a 64-year-old woman with a 6-month history of palpitation and dizziness with premature ventricular contraction (PVC) was refractory to treatment with beta-blockers and calcium channel blockers drugs. Transthoracic echocardiography showed mild left ventricular hypertrophy. The PVC beat had morphology of left bundle branch block with superior axis. The duration of the QRS complex PVC was 120 msec. The QRS complex had QS pattern in lead V1, R pattern in lead I and AVL, and an early precordial R/S transition between V1 and V2. Mapping at the site between tricuspid annulus (TV) and coronary sinus ostium (CSo) showed an early local activation at -22 msec and a QS pattern on unipolar lead. Pace mapping at this site showed perfect pace mapping. Radiofrequency (RF) catheter ablation was performed at this site during sinus rhythm. RF energy was delivered with maximum power of 30W and maximum temperature of 55 degrees. PVC disappeared by a single RF application for a few seconds. PVC was not inducible with ventricular burst pacing and isoproterenol infusion. During 10-month follow-up, PVC was not documented. Conclusions: We report a case with PVC arising from PS and were successfully treated with RF. Keywords: ventricular arrhythmia, ablation, premature ventricular contraction