A Case with Cardiogenic Shock That Two Kinds of Wide QRS, One Narrow QRS Were Induced and Coumel Phenomenon Are Concealed

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Case: 38 years old, Man.He admitted ambulatory for acute heart failure due to wide QRS tachycardia with cardiogenic shock. Wide QRS tachycardia presented left bundle branch block and Cardioversion was enforced at once. The organic heart disease was not found though various clinical inspections were enforced, and electro physiological study (EPS) was performed. Ventricular tachycardia (VT) was not induced by any ventricular stimuli. Instead of VT, three types of paroxysmal supraventricular tachycardia (PSVT), narrow QRS (Type 1), wide QRS with right bundle branch block (Type 2 CRBBB) and with left bundle branch block (Type 3CLBBB) were induced. Accessory pathway (AP) that existed on the posterior wall of left ventricle and dual pathway was found in EPS. At type 1 (HR=169bpm), the anterograde conducted slow pathway, and retrograde conducted AP. At type 2 (HR=187bpm) and 3 (HR=175bpm), the anterograde conducted fast pathway and retrograde conducted AP. If the AP existed at left ventricular, the cycle length of PSVT was expected to be extended at CLBBB compared with narrow QRS for Coumel phenomenon. But in this case, Coumel phenomenon was concealed by the existence of dual pathway. It was thought a rare case and we report the case.

Keywords: coumel phenomenon, wide QRS tachycardia, WPW syndrome