Pulmonary Artery Hypertension on RTc Dispersion Map Indicates the Concentration around Right Ventricular Overload Due to HIV Infection Using a High Resolution Mapping System

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Recently HIV related pulmonary artery hypertension (PAH) is one of the rare complication as the 1.4.2 of Dana Point classification. The incidence ratio has been revealed with 0.46% of HIV infection. We reported a case of 50 years old male who has suffered from HIV related PAH with the combination therapy using PGI2, ET-1 blocker and PDE-5 inhibitor under the HOT for 3 years. Standard ECG shows deep S in I and aVL, CRBBB, RVH and ST-T abnormality in all leads. We performed the evaluation of PAH with 79.5mmHg of the pressure gradient on UCG, and LF/HF=0.76 on autonomic nerve activity as heart rate variability (HRV), RMS540=1.4 micro V on ventricular delayed potential as a positive late potential (LP) and prolonged 91 ms (Avg 30ms) on the RT dispersion (RTd) using a vector composition high resolution mapping system, simultaneously. The development of 187-ch vector projected high-resolution ECG (DREAM-ECG: Fukuda densi Co). We evaluated the pulmonary hypertension pattern on the RTd map indicates the concentration around right ventricular overload as the color scattered map. It was thought that right ventricular overload pattern on RTd may play one of the important predictive factor as the diagnosis of PAH and repolarization heterogeneity.

Keywords: RT dispersion map, HIV related PAH