Progressive Electrocardiographic Changes in Arrhythmogenic Right Ventricular Cardiomyopathy

Masaki Ota, Yoshiaki Kaneko, Tadashi Nakajima and Masahiko Kurabayashi

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Picture 1.

A 77-year-old man was admitted to our hospital after the first episode of sustained ventricular tachycardia (VT) (Picture 1A). The 12-lead ECG during sinus rhythm showed typical epsilon waves (arrows) in the inferior and anterior precordial leads and inverted T waves in leads V₁ to V₅ (Picture 2C). A right ventriculogram showed right ventricular (RV) enlargement, moderate systolic dysfunction, and segmental dilatation of the anterior free wall (Picture 1B and C). Although histopathological examination of an endomyocardial biopsy of the RV free wall showed no fatty infiltration, 3 major and 1 minor criteria were fulfilled for confirming the diagnosis of arrhythmogenic RV cardiomyopathy (ARVC). Interestingly regarding morphology, in

Picture 2.

the seven years prior to admission, epsilon waves (arrows) were progressively changed and there was an increase in the number of leads detecting those, and the timing compared to the QRS complex was progressively delayed (Picture 2). The present case presents a unique observation of the electrocardiographic changes *preceding* the new occurrence of VT in an old patient with ARVC (1, 2), which may reflect the progressive pathological change which leads to the development of the arrhythmogenic substrate.

The authors state that they have no Conflict of Interest (COI).

References

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