Group beating related T-wave alternans in a patient with atrio-ventricular nodal reentrant tachycardia

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We report two electrocardiogram (ECG) tracings recorded in a 40-year-old woman with atrioventricular nodal reentrant tachycardia. The ECGs were recorded in the emergency room at admission (Panel A) and after the administration of adenosine intravenously (Panel B). The tachycardia slowed down showing a ‘group beating’ behaviour (consisting of two beats in each group) before termination. Noteworthy was the presence of T-waves alternans associated with the group beating phenomenon.

The main explanation of this ECG finding is the change in the heart geometry and filling consequent to the changing in coupling intervals during the group beating phenomenon.

Conflict of interest: none declared.

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