

[PICTURES IN CLINICAL MEDICINE]

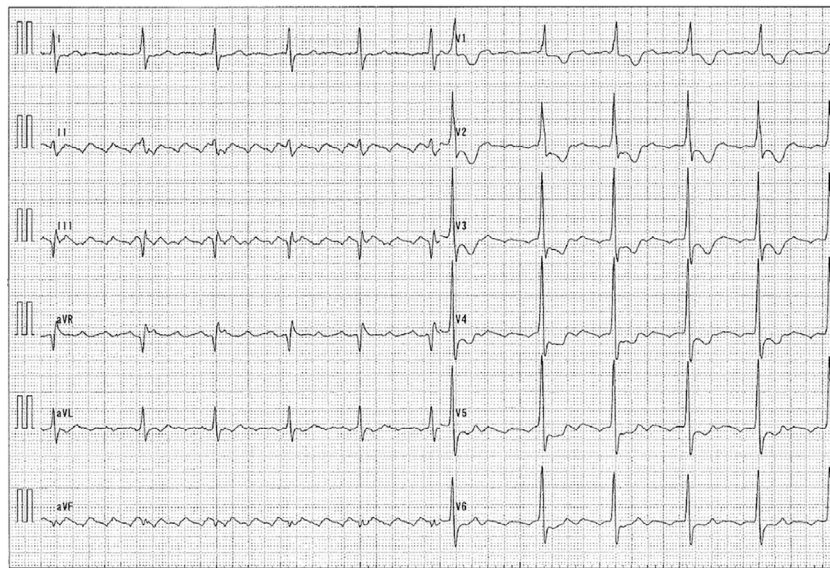
Paroxysmal Atrioventricular Block during Atrial Flutter

Junji Kaneyama and Tadanobu Irie

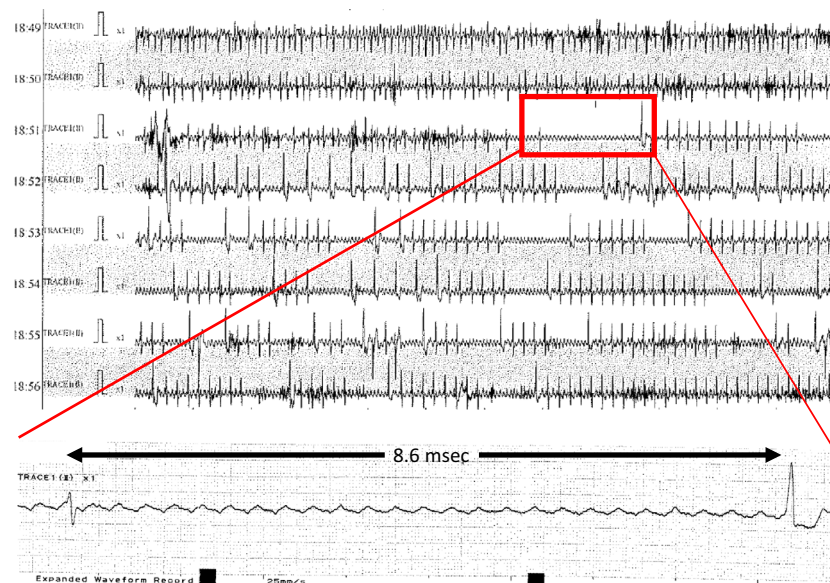
Key words: syncope, atrial flutter, paroxysmal atrioventricular block

(Intern Med 60: 3653-3654, 2021)

(DOI: 10.2169/internalmedicine.7514-21)



Picture 1.



Picture 2.

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Received: March 11, 2021; Accepted: March 26, 2021; Advance Publication by J-STAGE: May 14, 2021

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A 63-year-old woman with a history of percutaneous radiofrequency catheter ablation for paroxysmal atrial fibrillation presented with recurrent syncope without prodrome. The electrocardiogram (ECG) showed atrial flutter (AFL) with mean heart rate of 67 bpm (Picture 1). ECG monitoring after admission revealed paroxysmal atrioventricular block (PAVB) during AFL with syncope (Picture 2). After pacemaker implantation, the ECG indicated sinus rhythm and incomplete right bundle branch block. No recurrence of syncope has since been noted. PAVB is rarely documented during AFL. The differential diagnosis of syncope in patients with AFL includes sick sinus syndrome and AFL with 1:1 atrioventricular conduction (1). Importantly, PAVB occurs during AFL as well as sinus rhythm. The pathophysiology of PAVB presumably involves intrinsic atrioventricular (AV) block, extrinsic vagal AV block and low adenosine syncope (2). Vagal tone and metoprolol might have affected

atrioventricular conduction, based on her history, laboratory results and medications. PAVB should be considered in patients presenting with syncope and AFL.

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

References

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