



University of
Ottawa Heart Institute

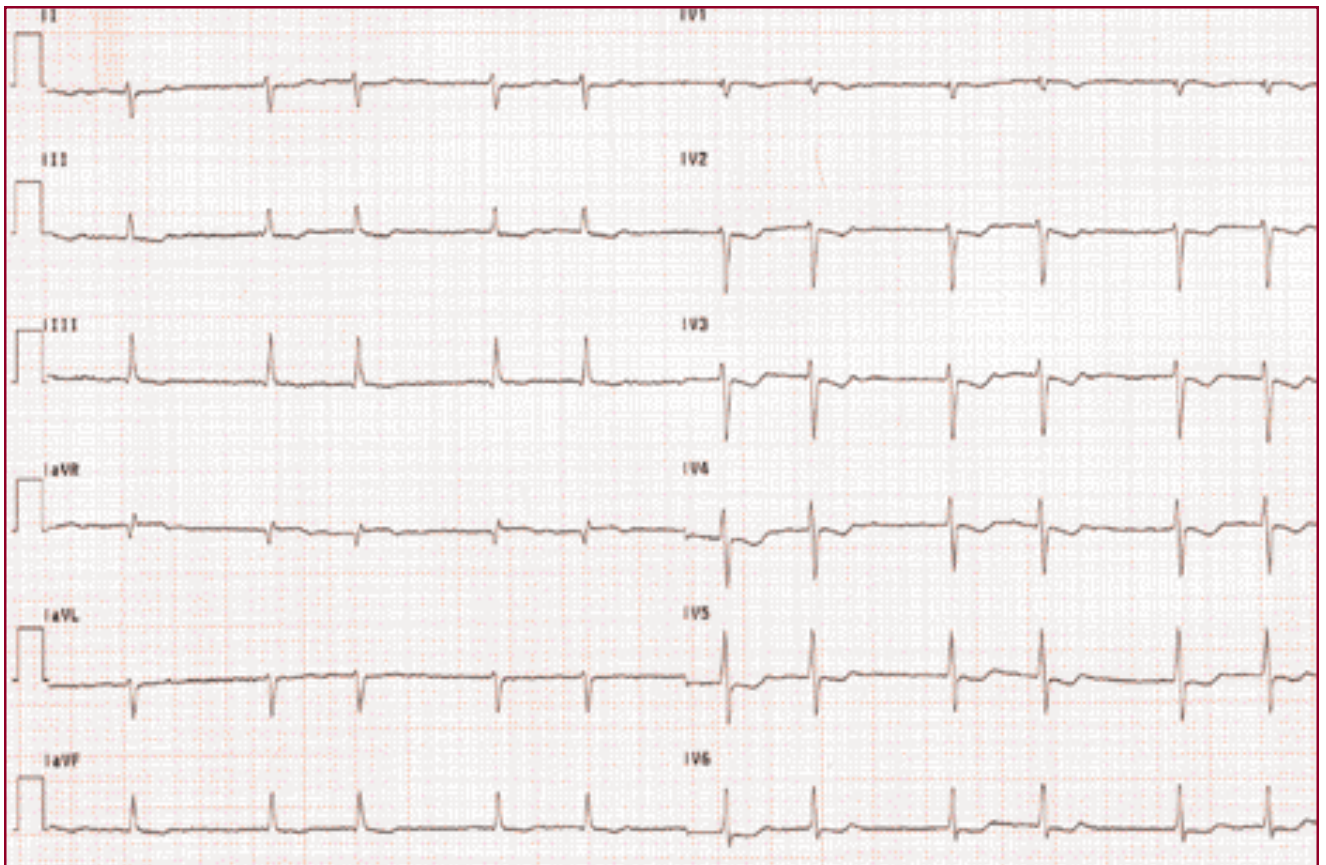
ECG of the Month

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Double Trouble

This is the ECG of a 73-year-old woman who presented to the emergency room with recurrent dizziness and pre-syncope.

What is the diagnosis?





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ECG of the Month

This Month's ECG Diagnosis

There is no distinct atrial rhythm in this ECG (shown below), however, there is evidence of fine irregular atrial activity in the baseline. The ventricular rate is 67 bpm, but there is clear evidence of group beating, in this case groups of two. The longer RR interval is always 1,100 msec and the shorter RR interval is always 700 msec. The QRS duration is not prolonged and there is right-axis deviation. There is diffuse ST segment and

T wave changes in the inferior leads and precordial leads, V2 to V6 with satisfactory R wave progression.

The atrial rhythm is atrial fibrillation (AF). In view of the regularly irregular ventricular rhythm with group beating, there must be AV dissociation. Therefore, there is heart block and a junctional rhythm with Wenckebach periodicity. The presence of diffuse ST segment changes in a patient with AF raises

