A 36 year old woman attended a routine pacemaker clinic follow-up. A pacemaker had been implanted 6 months previously. On questioning she admitted to “some loss of energy” when walking up hills since the previous week, but denied any other cardiac symptoms. She was on no medication. On examination she was well. An ECG was done.

**QUESTION:** Which ONE of the following best describes the ECG and the likely implanted system?

- (a) Normal atrial pacemaker (AAI pacemaker set at 90bpm)
- (b) AAI pacemaker with complete heart block
- (c) Dual chamber pacemaker set at a back-up heart rate <40bpm
- (d) Dual chamber pacemaker with capture of one chamber and not the other
- (e) Dual chamber pacemaker with failed capture of one chamber and with sensing of the other
- (f) Ventricular pacemaker (VVI) with lead dislodged to the atrium

Please analyse the ECG carefully and commit yourself to an answer before checking the explanation. **ANSWER on page** 122