

## Quiz: Pacemaker

Fragment of the ECG was recorded on the 12 leads  
Holter monitor ( Fig. 1).  
Speed of the recording – 25 mm/s.

The permanent pacemaker in DDD mode was implanted  
to patient.  
There are 5 morphologies of PQRST seen on this ECG.

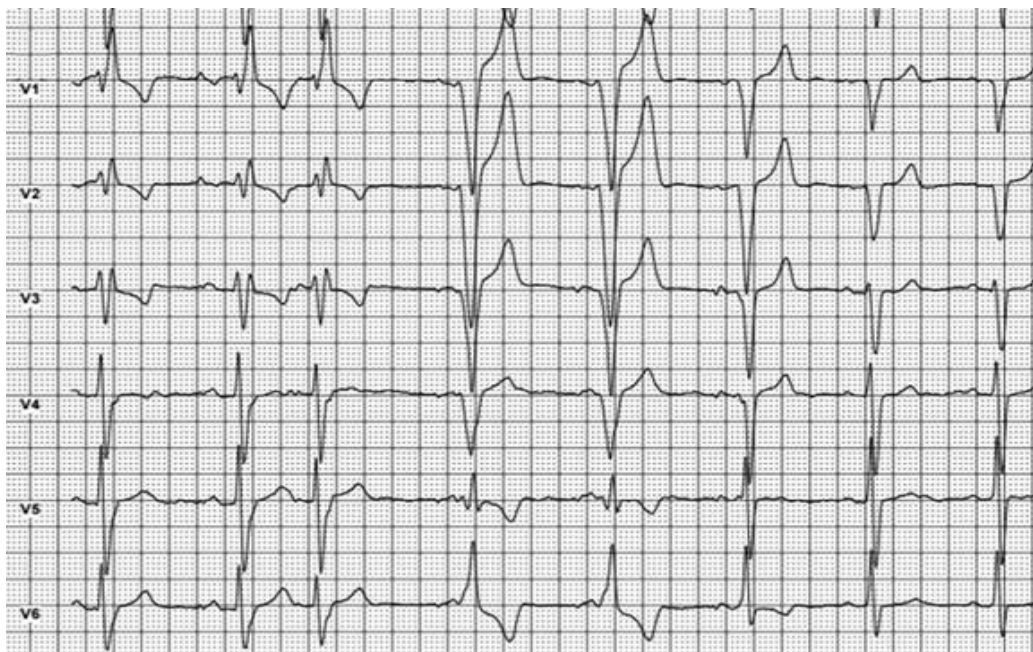
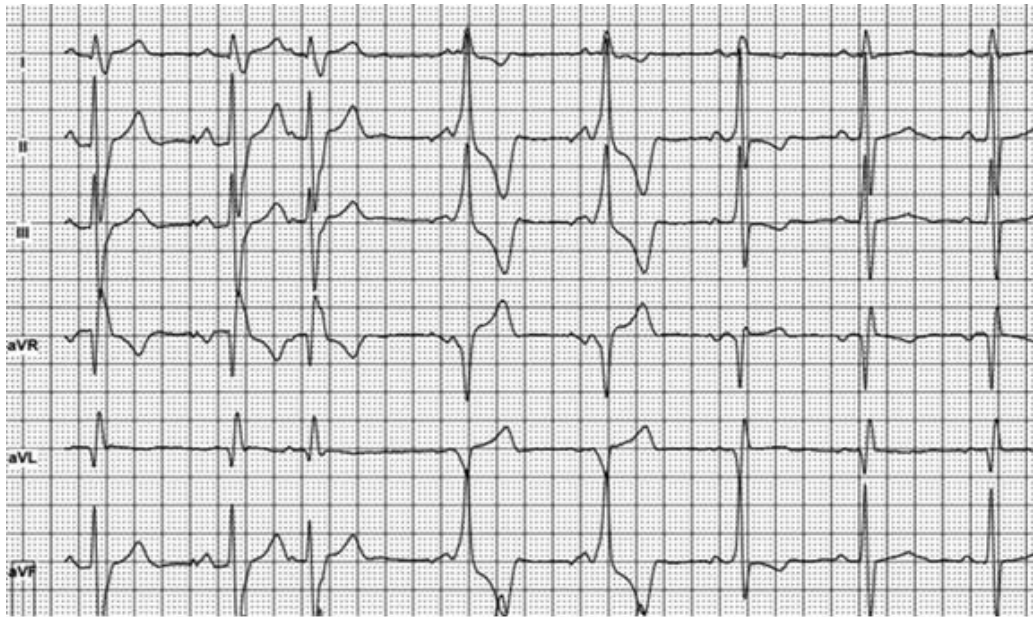


Figure 1. Multichannel Holter ECG recording  
ECG - electrocardiogram

The correct description of the PQRST complexes (showed by order of numbers below) morphology on this ECG is:

A) 1,2 – atria: sinus rhythm, ventricles: paced rhythm;  
3 – atria: premature beat, ventricles: paced rhythm;  
4,5 – atria paced rhythm, ventricles: impulse conducted via AV node with LBBB;  
6 – atria and ventricles – fusion beat;  
7,8 – atria and ventricles – sinus rhythm with incomplete LBBB.

B) 1,2 – atria: paced rhythm, ventricles: impulse conducted via AV node with RBBB;  
3 – atria: premature beat, ventricles: impulse conducted via AV node with RBBB;  
4,5 – atria: paced rhythm, ventricles: impulse conducted via AV node with LBBB;  
6 – atria and ventricles – fusion beat;  
7,8 – atria and ventricles – sinus rhythm with incomplete LBBB.

C) 1,2 – atria: paced rhythm, ventricles: impulse conducted via AV node with RBBB;  
3 – atria: premature beat, ventricles: impulse conducted via AV node with RBBB;

4,5 – atria sinus rhythm, ventricles: impulse conducted through accessory pathway;  
6 – atria and ventricles – fusion beat;  
7,8 – atria and ventricles – sinus rhythm with incomplete LBBB.

D) 1,2 – atria: paced rhythm, ventricles: impulse conducted via AV node with RBBB;  
3 – atria: premature beat, ventricles: impulse conducted via AV node with RBBB;  
4,5 – atria: paced rhythm, ventricles: paced rhythm;  
6 – atria and ventricles – fusion beat;  
7,8 – atria and ventricles – sinus rhythm with incomplete LBBB.

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(answer- page ..)