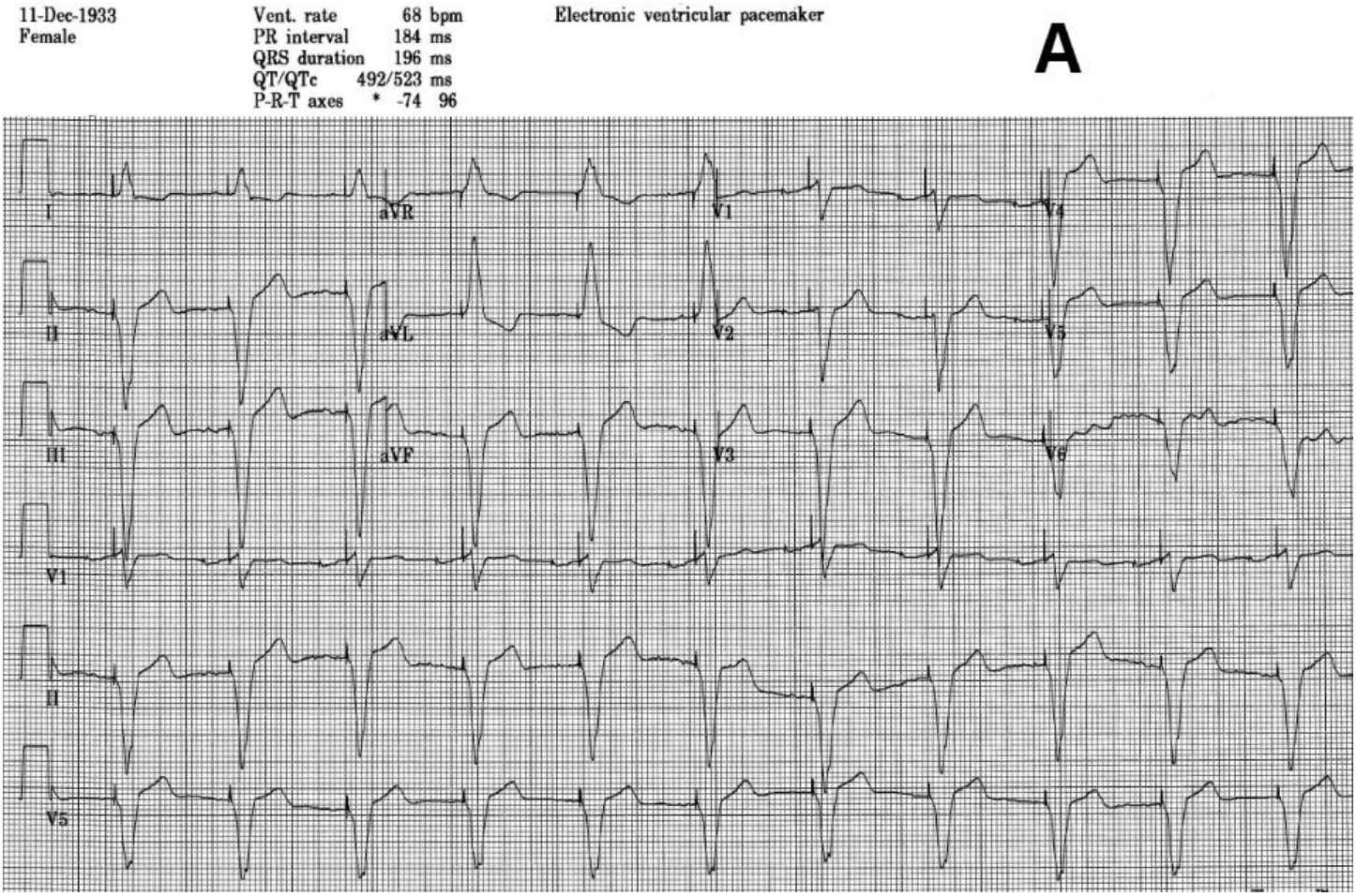
What's the Difference Here?

Short Discussion



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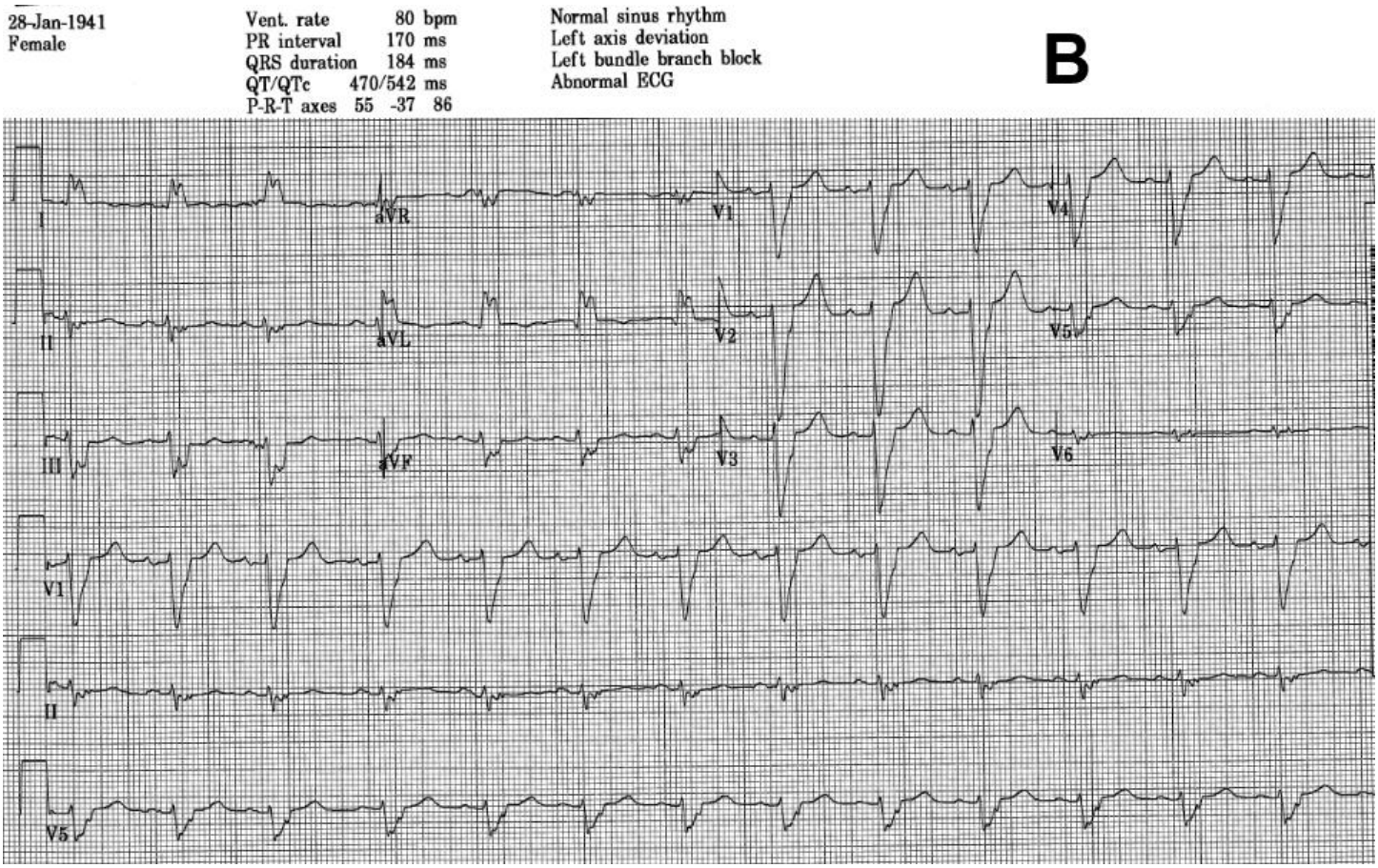
As the ECG machine print-out correctly states, this is an electronic ventricular pacemaker rhythm.

For a true LBBB to occur, *the impulse must enter the ventricles from the atria*... the route by which it will ultimately encounter the block. This does *not* require a *sinus* rhythm, but it *does* require a *supraventricular* rhythm.

ECGs **A** and **B** look very similar only because, in each case, the right ventricle is being activated *before* the left ventricle. In ECG A, the pacing wire is in the right ventricular apex, activating the right ventricle before the left. The inferior leads are all negative because they are seeing the impulse traveling away from the left foot – their positive pole.

What you see on this ECG (A) is a left bundle branch block *morphology!* Even the machine knew that!



This is sinus rhythm.

The supraventricular impulse enters the ventricles via the His bundle. However, the impulse is almost immediately blocked in the left ventricle, so the impulse continues down the right bundle branch and *activates the right ventricle first*. It then crosses the interventricular septum and likely activates the posterior fascicle first, creating the appearance of a LBBB with an anterior fascicular block. While the LBBB is *real*, the anterior fascicular block is *not* – it just *looks* like an anterior fascicular block.

Like a *real* LBBB, for a *real* anterior fascicular block to occur, the impulse must encounter the block *from above*.