

What Is the Cause of This AV Dissociation?

Discussion

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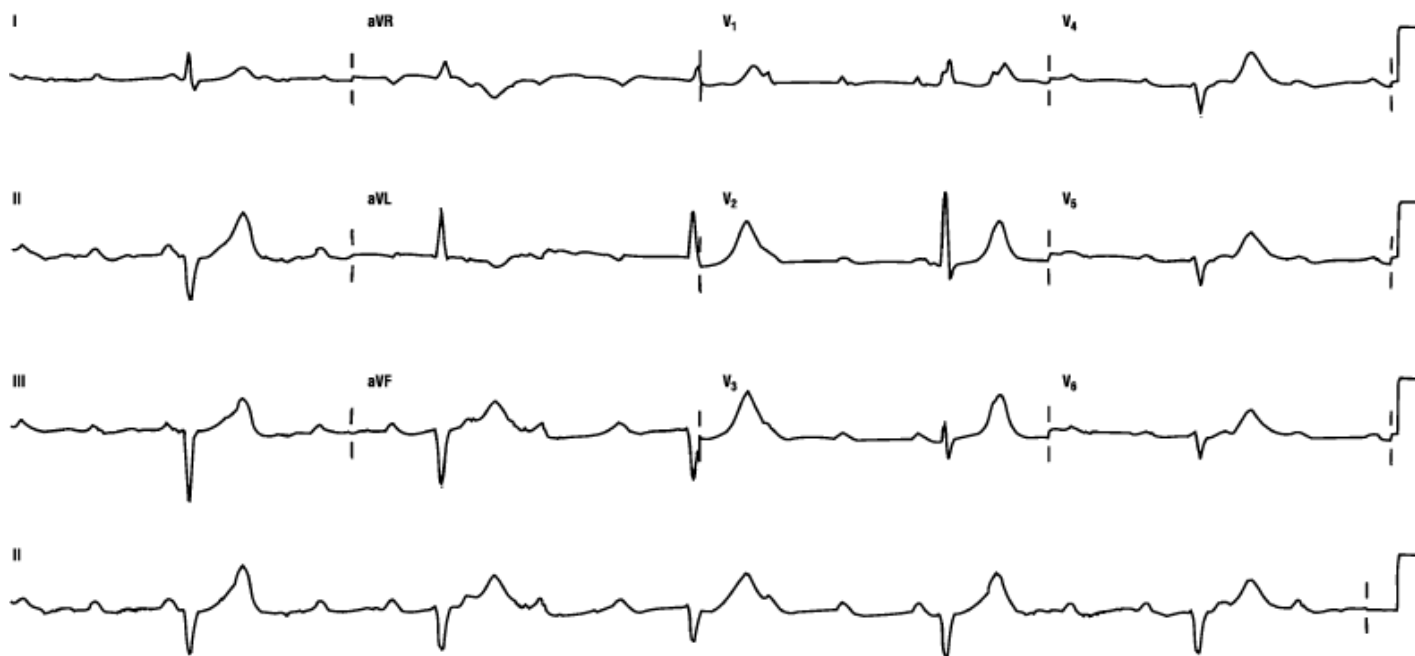


Figure 1

AV dissociation on this ECG is just the symptom of a more serious underlying problem. It has been caused by a third degree AV block.

Do not allow yourself to be misled by incorrect information online and even in some books! AV dissociation does NOT diagnose third degree AV block. Many websites and some books will tell you that if the P waves and QRS complexes have no relationship with each other, then there is a third degree AV block. Again, that is NOT true! There is MORE to the diagnosis of third degree AV block.

First, the real test of a third degree AV block is the presence of P waves that had every opportunity to conduct – but didn't! There are several P waves on the Lead II rhythm strip at the bottom of this ECG that should have been able to conduct – but they couldn't... because they were BLOCKED!

Second, the atrial (or sinus) rate will be faster than the escape rhythm – whether it's junctional or ventricular.

Another beginners' mistake is to assume that if the PR interval is normal – or at least, conductible – then conduction “must have occurred.” Look at this copy of the Lead II rhythm strip (next page):



Figure 2

The circles enclose PR intervals that are either *normal* or *prolonged but conductible*.

Always remember that during AV dissociation, a “normal” PR interval means *nothing*! The only reason it appears normal is because the ratio of atrial rate to ventricular rate caused it to appear that way. If there is no disturbance of the R-R intervals, there was NO CONDUCTION! And that applies to AV dissociation due to ANY cause!

So, remember: the next time you “diagnose” AV dissociation, AV dissociation is NOT the diagnosis – the *cause* of the AV dissociation will be the diagnosis!