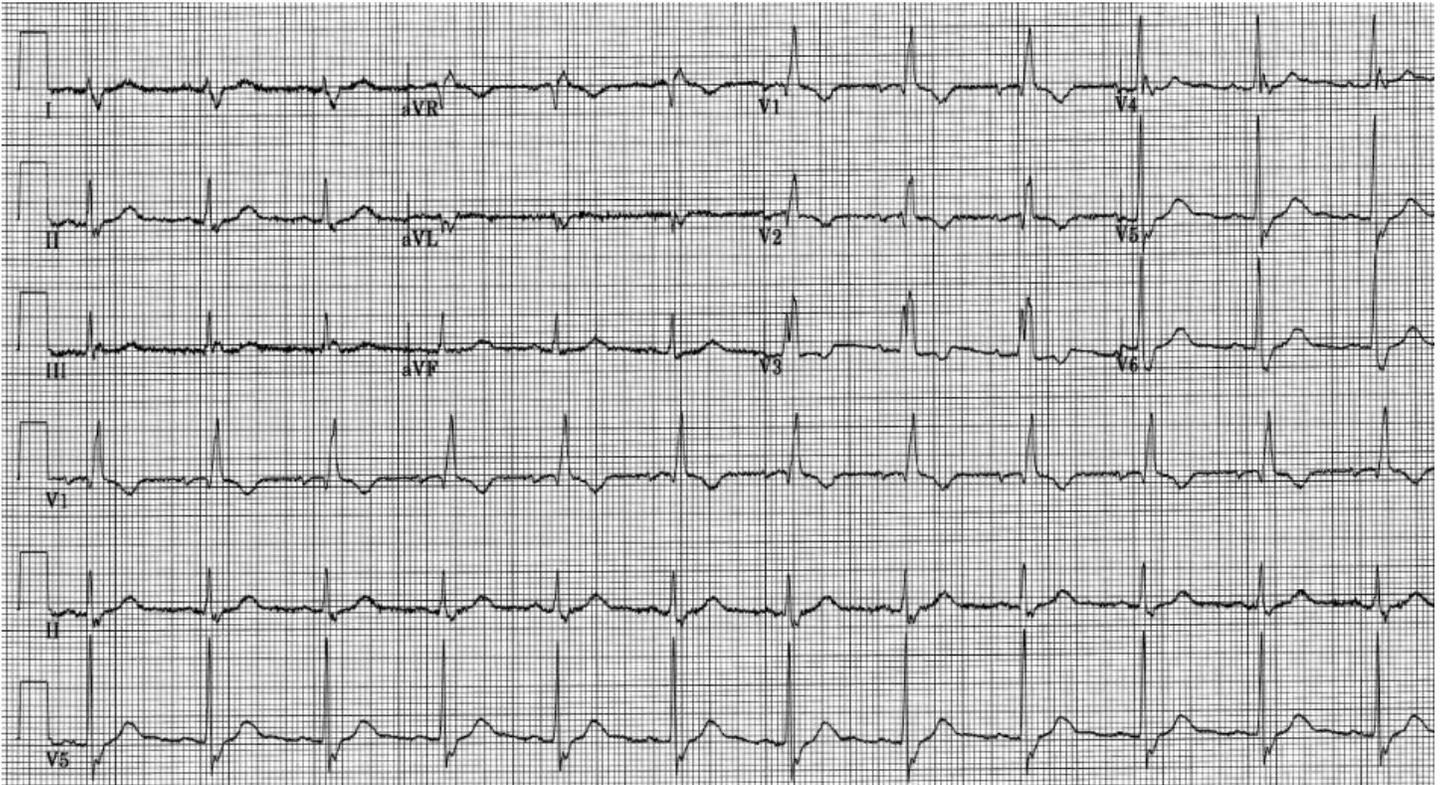


RBBB Can Be Very Tricky...



My last post about RBBB drew a lot of attention so I decided to write another one. I started to name it, "So You Think You Can Recognize RBBB?" (but then I thought better).

Again, I'm still trying to dispel the "rabbit ears" movement so I am featuring a 12-lead ECG that has a RBBB without "rabbit ears."

There are several things I want to point out.

First, the ECG meets the three requirements for RBBB...

QRS interval widened to 0.126 seconds

Terminal R wave in V1

Wide S wave in Lead I (as well as V6)

Second, the QRS in V1 has a qR morphology, not an rsR'.

Third, if someone (not YOU, of course!) only saw rhythm strips of V4 or V5, that person could easily assume he/she was reviewing an ECG with a narrow complex rhythm. Fast forward to another scenario in which this patient presents with a heart rate of 160/min. Ventricular tachycardias have been misdiagnosed as SVTs because only a single rhythm strip was used in

the diagnosis and verapamil unfortunately administered IV. I can recall two such events in which I was called to another area of the emergency department for this exact situation.

The moral here is that parts of the QRS interval (actually, its official name is QRS *interval* - not QRS *complex*) are sometimes isoelectric and can easily give the impression of a *narrow* QRS interval when, in fact, it is actually a *wide* QRS interval. If the isoelectric portion happens to be at the onset of the QRS, it may also give the impression of a prolonged PR interval. You never - wait! let me repeat that - you NEVER diagnose a dysrhythmia with a rhythm strip!

Dysrhythmias are *diagnosed* with 12-lead ECGs. They are *followed* and *monitored* with rhythm strips!

One last routine check that everyone should do before putting a 12-lead ECG away is to compare Lead I with V6: The QRS intervals should appear *essentially* the same. They don't have to be *exactly* the same - but *almost!* If they are not, then you have some explaining to do. In this case, there is a right axis deviation. RBBB is not especially associated with a right axis deviation. Could there be a concomitant RVH? Maybe, but I doubt it. For any RVH to appear on a 12-lead ECG, the right ventricular wall must hypertrophy to at least THREE TIMES its normal thickness! That is not likely to happen without some adverse effect on the right atrium and I see no evidence of right atrial enlargement or strain.

I hope you enjoyed this little discussion. Now take a moment to look around our website.