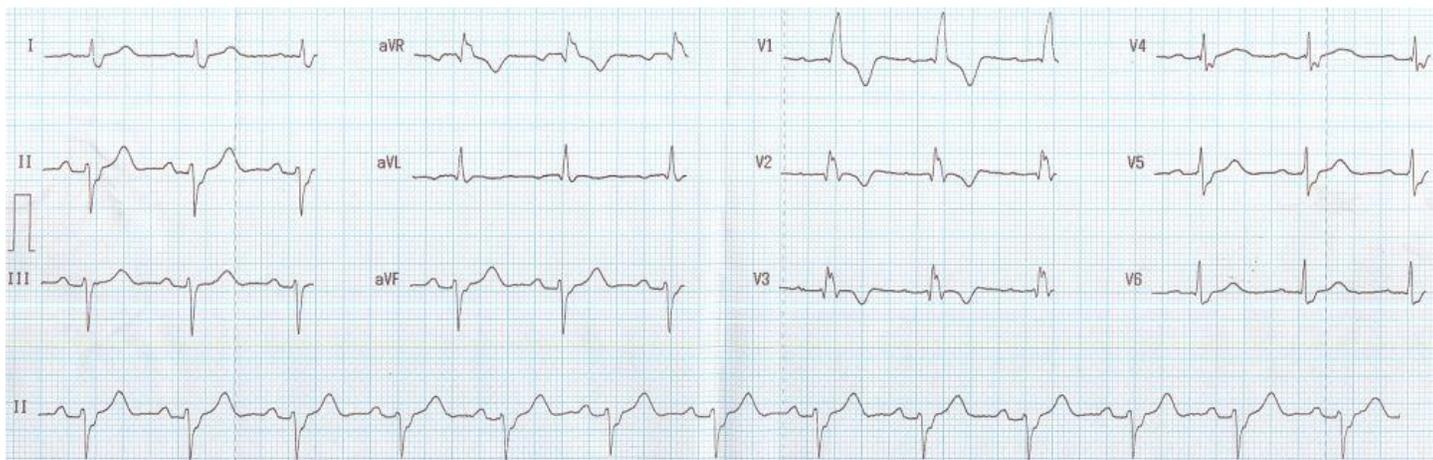


“Rabbit Ears” and Right Bundle Branch Block (RBBB)



Back in the 1950's or perhaps early 1960's Dr. Henry Marriott - as the story goes - overheard a nurse state that a right bundle branch block in Lead V1 looked like "rabbit ears," and the term stuck... unfortunately. Thus a myth has continued regarding the resemblance of a right-sided conduction delay to Bugs Bunny.

I'm here to set the record straight (no offense to you rabbit-lovers out there).

The morphology of the QRS complex in Lead V1 during right bundle branch block or delay is actually somewhat variable.

Myth Number 1: If there are no "rabbit ears" there is no RBBB.

False false false! Rabbit ears (rSR') do NOT have to be present in V1 during right bundle branch block. Just look at the ECG at the top of this post!

Myth Number 2: If the right rabbit ear (R') is taller than the left rabbit ear (r) then you have a normal RBBB and everything is OK.

Again, false false false.

Myth Number 3: If the left rabbit ear is taller than the right, then that represents ectopy and possibly ventricular tachycardia if it occurs during a rapid tachycardia.

Actually... that is basically *true!*

Let's look at Myth #1 - the presence of rabbit ears in V1. An rSR' is very characteristic of RBBB but it is certainly NOT a requirement. Here are the **three requirements for right bundle branch block:**

1. QRS complex widened to 0.12 seconds or greater
2. Terminal R wave in Lead V1
3. Wide, terminal S wave in Lead I and often Lead V6 as well

Note that there is no mention of "rabbit ears."

Now on to Myth #2 - right "rabbit ear" taller than the left is normal. I'm going to combine Myths 2 and 3 in this answer. When the LEFT rabbit ear (r) is taller than the right, *there is virtually nothing else that is going to cause that other than ventricular ectopy*. Normal RBBB's do NOT present that way. But unfortunately, the converse is not true: ***BOTH ectopy AND aberrancy can result in RBBB with the right "rabbit ear" taller than the left.*** If you see a lot of ventricular dysrhythmias in your practice, you will occasionally see ventricular tachycardia with an rSR' in V1. I have several ECGs demonstrating this in my collection and Marriott himself was adamant on this point.

When I was a first year internal medicine resident - many, many years ago - we had to do the ECGs on our patients ourselves and we had a single-channel ECG machine. This machine only produced a single long strip of paper. After running all the limb leads (I - II - III - aVR - aVL - aVF), we then ran the precordial leads one at a time - stopping, change the position of the suction-cup lead, start, stop, change... etc. Then the long, long strip of paper was rolled up and presented to the attending so that Lead I was the first lead he or she encountered.

I had just learned about "rabbit ears" and thought I was pretty good at recognizing RBBB. I would always wait for the attending to get to V1 and then I could jump in and say "Look! A right bundle branch block!" But that never happened. The attending never had to get past Lead I before announcing that there was a RBBB! How could that be? I eventually decided that the attendings were somehow psychic. Had I just known the REAL rules for diagnosing RBBB back then!