

Finding of short PR in a female student – 2001

Sarah Mourer

Dear Sir,

I am a Physician Assistant student at Gannon University and I have a question about an EKG performed on me in a lab class. My PR interval was 0.0116 sec. at rest and 0.106 sec. after mild exercise. My QRS interval was also high at rest, but all of my other intervals were average. Any information you could give me would be greatly appreciated. Thank you.

Sarah Mourer

OPINIONES DE COLEGAS

Dear Sara Mourer Physician Assistant student at Gannon University:

It is a great pleasure answer to amember of arrhythmias forum Andrés Ricardo Pérez Riera from SP Brazil.

The normal PR interval, measured from the P wave to the begining of QRS complex, ranges between 0,12 and 0,20 second (120ms -200ms). This is not to say that somewhat longer and shorter intervals necessarily indicate abnormality. You say that your PR is 0.0116 sec. at rest and 0.106 sec. after mild exercise and that your QRS interval was also high at rest. High voltage?? or wide???

I believe your diagnosis is easy: ventricular preexcitation or Wolff-Parkinson-White syndrome with "Oehnell phenomenon", concertina effect or "Anibal Troilo" phenomenon in Argentine Republic. Vagotonic effect in your case: it is related to the degree of ventricular preexcitation.

ECG/VCG characteristic are:

- 1- PRi short: interval less than 0,12second.
- 2- abnormally wide QRS with a duration of 0,11 second or more.
- 3- Delta wave at beginning of QRS complex. The presence of an initial slurring of QRS complex, the delta wave.
- 4- Normal P-J interval: begining of the P wave to J point.
- 5- Normal P-Z interval: begining of the P wave to apex R wave of QRS complex.
- 6- Secondary ST-segment and T-wave changes (ST-T)
- 7- The frequency association of paroxysmal tachycardia (40 %- 80 %).
- 8- Slow at the beginning of 3 planes at VGC: TP (transverse Plane), P (Frontal Plane) and SP (sagittal plane).

Best regards,

Andrés R. Pérez Riera