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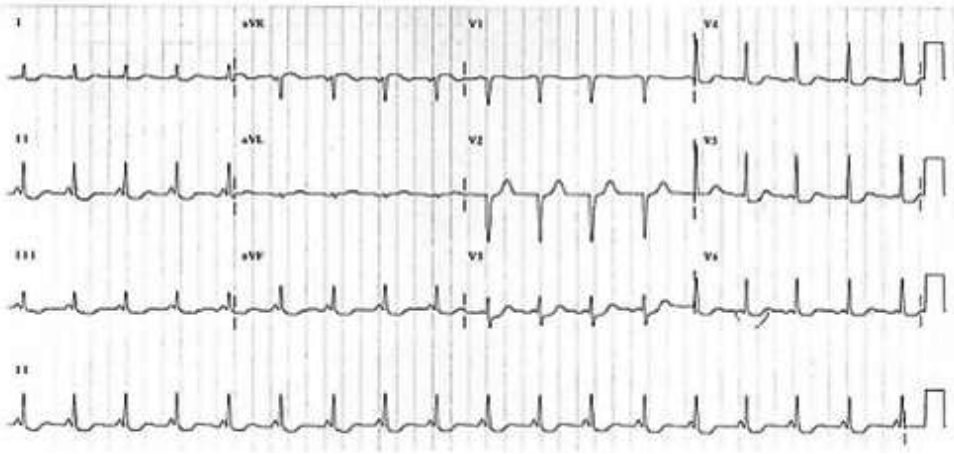
ECG Corner

Dr. M. Chenniappan

Cardiologist, Trichy

This is the ECG of a 60-year-old patient with rest chest pain. Previous ECGs are not available.

"Carefully Note and Read"



1. What are the ECG findings?
2. Why is this clue?
3. What are the practical implications?

ECG Findings:

The main finding in this ECG is short PR with no delta wave or wide QRS. In addition, there is anterior ST depression and avR ST elevation. The anterior ST changes and avR ST-elevation suggest left main coronary artery critical occlusion.

The Clue:

In short, PR, with upright P in LII, L III, and avF with no delta wave, we can suspect James Pathway pre-excitation, bypassing the AV node and then conducting through the normal pathway henceforth the narrow QRS. But only in the presence of h/o palpitation and documented episode of tachycardia it is called "LownGanong Levine syndrome" (LGL syndrome). So this ECG you cannot interpret as LGL syndrome without history. The name given to this type of ECG is Coronary Nodal Rhythm. (CNR). That's why the clue of **"Carefully Note and Read"** (CNR) is given. The following figure explains the approach to short PR.

Practical Implications:

The immediate management in this ECG is for ST depression and avR elevation by doing an immediate coronary angiogram and suitable revascularisation. The short PR interval does not need any intervention. EP studies and Radio Frequency ablation may be planned if the patient develops tachycardia.

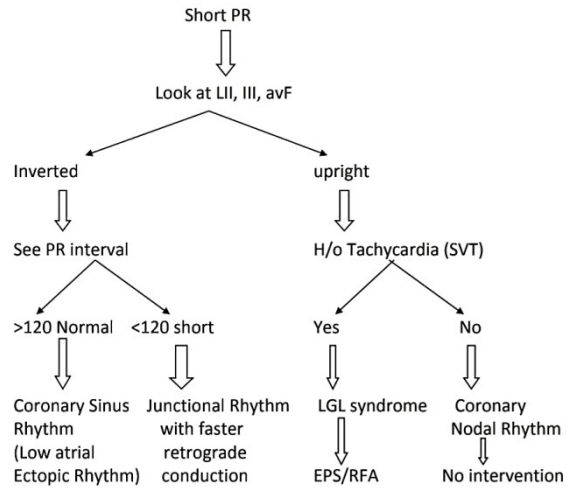


Fig: *Approach to Short PR with No Delta Wave*