

## Student's Corner

### Become a Sherlock Homes in ECG

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**Series 7 :**

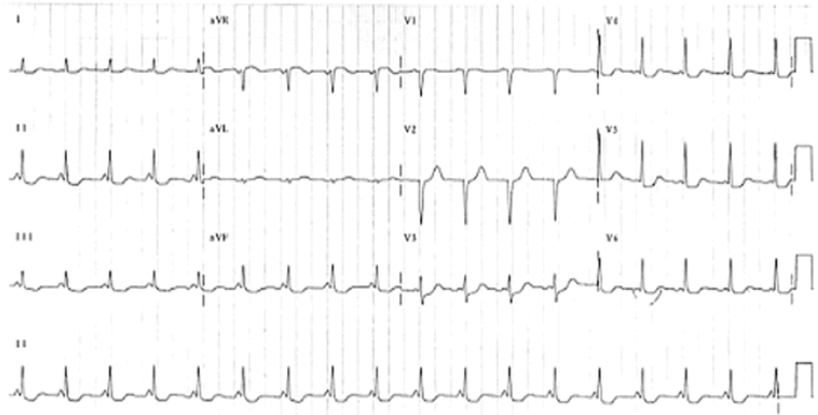
**ECG**

“This is the ECG of 60 year old patient with rest chestpain.

Previous ECGs are not available.

“Carefully Note and Read”

1. What are the ECG findings?
2. Why is this clue?
3. What are 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 is suggestive of Left main coronary artery critical occlusion.

**THE CLUE :**

In the presence of short PR, with upright P in LII, L III, aVF with no delta wave, we can suspect James Pathway pre excitation which is by passing the AV node and then conducting through normal pathway, hence the narrow QRS. But only in the presence of h/o palpitation and documented episode of tachycardia it is called “Lown Ganong 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 figure 60A explains the approach to short PR.

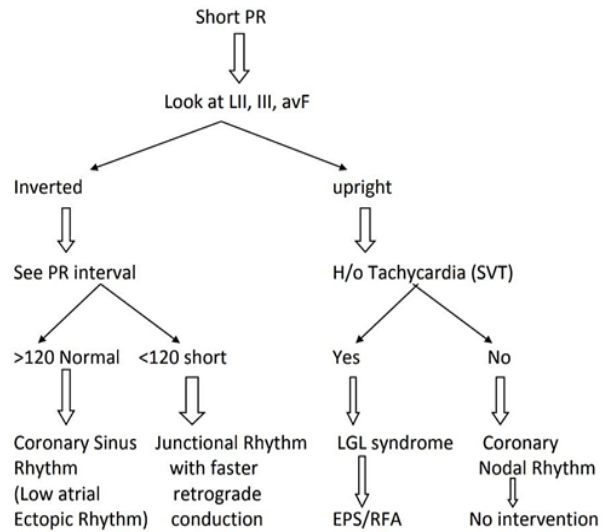


Fig.60 A — APPROACH TO SHORT PR

**PRACTICAL IMPLICATIONS:**

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

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