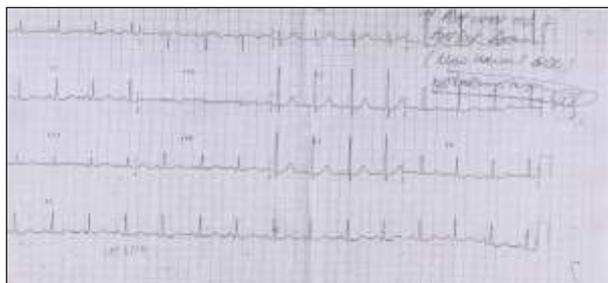


## ECG of the Month

Uday Mahorkar\*, Poonam Lavhe\*\*



**Figure 1 : ECG on admission showed 4 mm ST depression I,avL, II, III, avF ST elevation in avR With High Grade Av Block**



**Figure 2 : ECG After Thrombolysis- near normalized ST segment**

A 59 year old male presented with complaints of uneasiness sweating dyspnoea since 1 hour prior to admission. On arrival, Patient was uneasy with sweating, P-100/min, BP- 90/60, & normal systemic examination. He was hypertensive since 2005. His ECG on admission showed 4 mm ST depression I, avL, II, III, avF; ST elevation in avR with high grade AV block. Although ECG did not fulfill the usual criteria for thrombolysis, with this clinical picture, it was decided to thrombolyse with retelex

(tenectaplast). Post thrombolysis, his symptoms subsided and haemodynamic parameters improved. His ECG after thrombolysis showed remarkable recovery with near normalized ST segment. His CAG on 18.3.14 revealed ostial LCX 50-60- %.

ECG is often regarded as the basic and most powerful tool for predicting the culprit artery with proven efficacy. But there may be exceptions to this rule because of the varied Coronary Anatomy as is evident in this case where the ECG picture in view of ST elevation in avR, and high grade AV block in presence of ST Depression raised suspicion of Proximal LAD whereas Angiography revealed a ostial LCX lesion.

Approximately 15% of patients have a “left-dominant” circulation. In such cases, the RCA is a smaller vessel, terminating before it reaches the crux. To compensate, the LCx is larger and gives rise to the Posterior Descending Artery (PDA). LCx supplies the postero-lateral wall and posterior part of the inferoposterior septum. In 13.3% of the population, LCx gives rise to PDA. Awareness of the left-dominant anatomic variant accounts for infero-postero-lateral infarction patterns. Such patients may also manifest Mobitz I AV block from acute LCx occlusion because the AV Nodal artery is usually supplied by the LCx when this vessel is dominant.

Isolated left circumflex coronary disease is infrequently shown at angiography. The prevalence of disease of 2.4% is confirmed in many studies.

Isolated circumflex disease may be suspected by the use of clinical and electrocardiographic criteria, but cannot be definitely diagnosed. Disease in the proximal segment of the circumflex was associated with both lateral and inferior electrocardiographic patterns and with thallium defects in the Lateral, Inferior, Posteroinferior & posterior segments; this association may reflect the fact that the proximal circumflex supplies both the posterolateral and posteroinferior myocardium.

\* Chief Cardiologist and Director,  
 \*\* Consultant Physician,  
 Avanti Institute of Cardiology Private Limited,  
 Dhantoli, Nagpur

**Address for Correspondence -**

Dr. Uday Mahorkar  
 E-mail : drudaymahorkar@yahoo.com

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