



## **A Cross Sectional Study on Correlation Between Lead aVR Positive Finding in ECG of Acute Myocardial Infarction Patients with Coronary Angiographic Findings Admitted in a Tertiary Care Centre**

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### **Abstract:**

#### **Introduction :**

Cardiovascular disease remains one of the leading cause of mortality and morbidity in India .Identification of ST elevation myocardial infarction (STEMI) is critical because early reperfusion can save myocardium and increase survival.AHA /ACC STEMI guidelines notes that “ST elevation in lead aVR with specific repolarisation patterns ,considered as a STEMI equivalent “.

#### **Aim:**

To find correlation between ECG changes of lead aVR positive in acute STEMI patients with coronary angiographic findings.

To study the management pattern CAG - coronary localisation , outcome of aVR positive STEMI patients .

**Method:** Patients admitted with acute myocardial infarction in INTENSIVE CORONARY CARE UNIT at Chengalpattu Medical college and Hospital during

the period of Jan 2020 to JUNE 2022. Out of 562 STEMI patients were admitted during our study period, by applying our inclusion and exclusion criteria 140 study subjects were selected.

### **Results:**

Among 140 patients mean age is 56.4 yrs, majority of the patients in 5<sup>th</sup> and 6<sup>th</sup> decade and male patients is 112(80%) and female patients 28(20%). ECHO shows majority of the patients had mild LV dysfunction 96 patients (68.5%).In CAG findings aVR positive STEMI patient majority of the patients had single vessel disease involving LAD 44.2% followed by triple vessel disease 24.29% .Among single vessel disease proximal LAD is common(74.3%).On comparison of aVR magnitude >1mm associated with TVD and LMCA and most of them requiring invasive mode of treatment.

### **CONCLUSION**

- ❑ Analysis using different types of STEMI showed that this pattern was seen mostly in anterior STEMI. aVR ST elevation denotes extensive coronary artery disease in left coronary system with more patients going for CABG.

### **Keywords:**

ECG, STEMI, aVR, CABG