**CORRELATION BETWEEN ELECTROCARDIOGRAPHIC CHANGES AND CORONARY ANGIOGRAPHY FINDINGS IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION AND SINGLE-VESSEL DISEASE**

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*Objective*: To investigate the correlation of electrocardiographic (ECG) abnormalities in patients with ST-elevation myocardial infarction (STEMI) and in non-ST-elevation myocardial infarction (NSTEMI) with the location of 1-vessel obstructive (>50% occlusion) coronary artery disease (CAD).

*Methods*: Of 131 patients, 29 had STEMI and 102 had NSTEMI with chest pain, dyspnea, or chest pain plus dyspnea and increased cardiac troponin I (>0.04 ng/ ml) with 1- vessel angiographic obstructive CAD. The 131 patients included 97 men and 34 women, mean age 64 years. An experienced electrocardiographer interpreted the location of the ECG abnormalities in a blinded study without knowing any history or angiographic findings. ECG criteria for STEMI were ST-segment elevation and pathologic Q waves. ECG ischemic abnormalities were ischemic ST-segment depression or ischemic T waves.

*Results:* Eleven of 11 patients (100%) with ECG anterior STEMI had left anterior descending coronary artery (LAD) obstructive CAD. Of 18 patients with inferior STEMI, 14 (78%) had right coronary artery (RCA) obstructive CAD, 3 (17%) had left circumflex coronary artery (LCX) obstructive CAD, and 1 (5%) had LAD obstructive CAD. Of 102 NSTEMI patients, 53 (52%) had definite ECG ischemic abnormalities. Of 31 patients with anterior wall definite ECG ischemic abnormalities, 30 (97%) had LAD obstructive CAD, and 1 (3%) had RCA obstructive CAD. Of 22 patients with inferior wall definite ECG ischemic abnormalities, 14 (64%) had RCA obstructive CAD, 5 (23%) had LCX obstructive CAD, and 3 (14%) had LAD obstructive CAD.

*Conclusions*: Only half of NSTEMI patients had ischemic ECG abnormalities. Patients with anterior wall STEMI had LAD obstructive CAD. Patients with inferior wall STEMI were likely to have RCA or LCX obstructive CAD. Patients with NSTEMI and anterior wall ischemic ECG abnormalities had LAD obstructive CAD. Only patients with 1-vessel obstructive CAD were included in the study.