LETTER TO THE EDITOR

LMCA Disease and T-Wave Positivity in Lead aVR

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Dear Editor,

I read the article entitled "Prognostic Significance of T-Wave Amplitude in Lead aVR on the Admission Electrocardiography in Patients with Anterior Wall ST-Elevation Myocardial Infarction Treated by Primary Percutaneous Intervention" with interest.¹ T-wave positivity in patients with acute anterior STEMI was associated with multivessel disease and higher mortality rates and thus poor prognosis. In this study T-wave positive patients had more flat (60.3%) and elevated ST segment (37.7%) in the lead aVR.

ST segment elevation in lead aVR is the most significant electrocardiographic pattern of left main coronary artery (LMCA) disease. Atie et al.² studied 127 consecutive patients with angiographically proven LMCA disease. During chest pain, all patients had an abnormal finding of ECG, the most frequent pattern was ST segment depression in leads V₃₋₅ and ST segment elevation in leads V₁ and aVR. Hori et al.³ described 13 patients with acute MI caused by total occlusion of the LMCA during 8 years. ST segment elevation in lead aVR was present in 69% of patients and five of six nonsurvivors had ST segment elevation in both leads aVR and aVL. Yamaji et al.⁴ also described electrocardiographic features of acute LMCA obstruction in the patient with acute coronary syndrome. Lead aVR ST segment elevation (>0.05 mV) occurred with significantly higher incidence in the LMCA obstructed patients (88%). Lead V₁ ST segment elevation was lower in

the LMCA group. They reported that lead aVR ST segment elevation with less lead V₁ ST segment elevation was an important predictor of acute LMCA obstruction. Bitigen et al.⁵ demonstrated that ST segment elevation in lead aVR and also in leads D1 and AVL indicated significant LMCA stenosis.

Although Ayhan et al. highlighted the prognostic significance of T-wave positivity in lead aVR, they did not give detailed information about the angiographic features of the coronary artery disease. Correlating T-wave positivity and LMCA disease may add valuable information in the evaluation of patients with acute coronary syndrome.

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