

Angiocardiographic findings in patients with Wellens' syndrome who admitted to Emem Khomeini Hospital

Abstract

Background and Objective: Wellens' syndrome is a pattern of electrocardiographic T wave changes (biphasic T-wave inversion) in pericardial leads associated with critical stenosis of proximal left anterior descending artery (LAD). The aim of this study was to determine the angiocardiographic findings in patients with Wellens' syndrome who admitted to Emam Khomeini Hospital in Ardabil.

Methods: patients with history of recent chest pain who electrocardiographic findings were compatible with Wellens' syndrome and were underwent angiography in Ardabil Emam Khomeini Hospital between July and September in 2017 were studied. All patients' data as age, gender, risk factors for coronary artery disease and the results of angiography were collected and were analyzed by SPSSv22.

Results: in this study, the mean age of patients was 58.7 ± 10.67 . The number of female patients was higher than male patients (32.5% male and 67.5% female). 32.5% of patients had diabetes history and 72.5% had a history of blood pressure. Most of the T wave changes on ECG was inverted T- wave in V1-V2 leads (30%). Angiographic findings showed that 75% of the subjects had involvement in the LAD and most of the stenosis was in the mid part of the artery. In 35% of the patients, the LCX vessel had stenosis. Also, 27.5% of the subjects had involvement in the RCA.

Conclusion: Result of this study showed that, unexpectedly prevalence of Wellens' syndrome in women was more than men. Most of the T wave changes on ECG was inverted T- wave in V1-V2 leads. Like other studies, the most common artery that had stenosis was LAD and the most common site of the lesion was Mid part of LAD.

Keywords: Wellens' syndrome, T-wave inversion, Coronary angiography