

## Frequency of coronary artery ectasia among patients undergoing cardiac catheterization

*Kardiyak kateterizasyon uygulanan hastalarda koroner arter ektazisi sıklığı*

Coronary artery ectasia (CAE) is defined as a 1.5- to 2-fold enlargement of a segment of coronary artery, compared to the diameter of the adjacent (normal) segment of artery. Although the etiology of coronary artery ectasia has not been identified completely, the most frequent cause is coronary atherosclerosis. Its etiology also includes congenital coronary artery anomalies, inflammatory and connective tissue diseases, invasive coronary interventions and rarely, trauma (1). The prevalence of CAE, as determined by angiography, varies between 0.3% and 5.3% (2). In a study performed in India (3), the frequency of CAE was determined to be higher, reporting an incidence of 10%. To our knowledge, there have been no studies performed in Turkey investigating the frequency of CAE. Therefore, the aim of the present study was to investigate the frequency of CAE in patients who had undergone coronary angiography in our clinic within last nine years.

Overall, 12.117 patients, who had undergone coronary angiography (CAG) in our clinic between the years 2000 and 2008, were examined. From this group, 1208 patients were determined to have CAE and were included in the present study. The frequency of CAE was determined to be 9.9%. The mean age of the patients was 56±11 years and the number of male patients was 641 (53%). Hypertension was the most frequently encountered atherosclerotic risk factor among patients with CAE (n=549, 45%). In patients whose clinical characteristics were examined prior to coronary angiography; stable angina pectoris was noted in 747 patients (61.8%); acute coronary syndrome without ST elevation was present in 318 patients (26.4%); acute myocardial infarction with ST elevation was present in 27 patients (2.2%); congestive heart failure was diagnosed in 25 patients (2.1%); and valvular heart disease was present in 91 patients (7.5%). Coronary ectasia was most frequently observed in the left anterior descending (LAD) coronary artery. In 417 of the patients (34.5%), single- vessel involvement was present. Focal

ectasia was determined in 373 patients (30.8%). In contrast to focal ectasia, diffuse ectasia was observed most frequently in the right coronary artery (40.9%). It was also observed, to a lesser degree, in the circumflex artery (30.7%) and in the LAD (28.4%).

As compared to other published studies (2), the frequency of CAE was higher in the present study. We postulate that this higher frequency may be due to the high exposure to pesticide (4) and fluorosis (5) in our region.

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