**ASSESSMENT THE ROLE OF CORONARY CLEARANCE FRAME COUNT IN PATIENTS WITH CARDIAC SYNDROME X**

**E. Yildirim1**, U.C. Yuksel1, B. Bugan2, M. Celik1, M. Koklu1, S. Gormel1,

H.K. Kabul1, C. Barcin1

1. Gulhane Military Medical Academy, Department of Cardiology, Ankara, Turkey

2. Girne Military Hospital, Cardiology Service, Girne, North Cyprus

*Background*: Cardiac Syndrome X (CSX) is describing patients with typical angina pectoris with a positive stress test and normal coronary arteries on angiography. There is no simple diagnostic modality to evaluate the coronary microcirculation. Coronary clearance frame count (CCFC) is reported to be a good predictor of myocardial reperfusion achieved following primary angioplasty.

*Objectives*: The aim of this study was to assess the role of CCFC in patients with CSX. *Methods*: Our study has a retrospective design and conducted on data acquired from a single-center. 47 patients with angina, a positive nuclear imaging test and normal coronary angiography, included to our study. The control group consisted of 47 patients who underwent angiogram for excluding coronary artery disease due to arrhythmias. CCFC was defined as the number of angiographic frames elapsed from the first frame in which the contrast medium is seen to be cleared from the ostium of the examined artery to that in which the contrast begins to be cleared from the same distal artery landmark proposed by the TIMI Group.

*Results*: Baseline characteristics including age, sex, and cardiovascular risk factors were similar in 2 groups. No significant differences were found between the two groups with regard to TFC-LAD, TFC-CFX and TFC-RCA. CCFC-LAD (47,10±7,84vs38,32±6,61), CCFC-CFX (45,54±8,58vs34,87±5,63) and CCFC-RCA (44,68±10,56vs30,99±6,04) were significantly different between two groups (p=0,001).

*Conclusion*: Our study demonstrated a delay in CCFC in patients with CSX. CCFC is a simple, quantitative and highly reproducible method and can be used as a marker of microvascular dysfunction in patients with CSX.