

aim of this study is to investigate the relationship between serum Angptl6 levels and the angiographic extent and severity of coronary artery disease.

**Methods:** One hundred and thirty-four individuals who underwent coronary angiography due to a positive stress test were included in the study. Individuals who had at least 50% percent stenosis in a major epicardial artery and a Gensini score  $\geq 20$  constituted the patient group (n=68), and those who did not have any significant stenosis and with a Gensini score  $< 20$  constituted the control group (n=66). Serum Angptl6 levels were determined using the ELISA method.

**Results:** Serum Angptl6 levels were significantly lower in the patient group when compared to the control group (1193.5 $\pm$ 430.3 ng/mL vs. 1349.2 $\pm$ 427.8 ng/mL, respectively; p=0.044). There was a negative correlation between serum Angptl6 levels and the Gensini score which displayed a trend towards significance (r=-0.163, p=0.06).

**Conclusion:** Serum Angptl6 levels are lower in individuals with significant coronary artery disease when compared to those without. Angptl6 levels are inversely related to the angiographic extent and severity of disease, albeit without reaching statistical significance. The possible anti-atherosclerotic action of Angptl6 should be elucidated with further studies.

#### PP-298

##### Impact of Lunar Phases on the Occurrence of Acute ST Elevation Myocardial Infarction, Culprit Vessel and Success of Primary Percutaneous Coronary Intervention

İbrahim Sarı<sup>1</sup>, Hayri Alici<sup>2</sup>, Vedat Davutoğlu<sup>2</sup>, Orhan Ozer<sup>2</sup>, Fethi Yavuz<sup>2</sup>, Murat Yuce<sup>2</sup>, Süleyman Ercan<sup>2</sup>, Erdal Durmuş<sup>1</sup>, Tarik Kivrak<sup>1</sup>

<sup>1</sup>Department of Cardiology, Marmara University, Istanbul, <sup>2</sup>Department of Cardiology, Gaziantep University, Gaziantep

**Background:** Impact of lunar phases on the occurrence of myocardial infarction is controversial. We aimed to investigate the impact of lunar phases on the occurrence of acute ST elevation myocardial infarction (STEMI), culprit vessel and success of primary percutaneous coronary intervention (PCI) which has not been studied previously.

**Methods:** A total of 452 patients (mean age 58.9 $\pm$ 12.2, 20.1% female) between 2006 and 2011 in a single center with the diagnosis of acute STEMI and for whom primary PCI was performed were included into the study. Lunar cycle was divided into 4 phases named new moon, waxing moon, full moon and waning moon with  $\pm 3$  days around each phases.

**Results:** Overall, 24.8% of acute STEMI occurred in new moon, 24.8% in waxing moon, 27.7% in full moon and 22.8% in waning moon. There was no impact of lunar phases on the occurrence of acute STEMI (p>0.05). When analysing the culprit lesion, left anterior descending artery lesion was more common in full moon (p:0.042) where as rate of circumflex and right coronary artery lesions were similar in all lunar phases (p>0.05 for both). Mean age, male to female ratio and primary PCI success rate were similar in all lunar phases (p>0.05 for all).

**Conclusion:** Lunar phases do not seem to be associated with the occurrence of acute STEMI and success of primary PCI however, left anterior descending artery lesion (anterior myocardial infarction) seems to be more common in full moon period. The potential interrelation of lunar phases with acute STEMI needs to be evaluated with large scale studies.

#### PP-299

##### Evaluation of Association between Epicardial Adipose Tissue Volume and Coronary Artery Calcium Score with Multislice Computed Tomography

Müslüm Şahin, Mustafa Çetin, Zehra Güven Çetin, Emrullah Kızıltunç,

Hülya Çiçekçiöğlü, Ender Örneç, Feridun Vasfi Ulusoy

Ankara Numune Education and Research Hospital, Ankara

**Introduction:** Epicardial adipose tissue is able to produce and secrete various types of adipo-cytokines and is thought to be an important cardiovascular risk indicator. Epicardial adipose thickness and/or volume is related with impaired glucose intolerance, metabolic syndrome, obesity, hypertension and atherosclerosis. In this study we aimed to explore the relationship between coronary artery calcium score (CACS) and epicardial adipose tissue volume (EATV).

**Method:** Ninety nine patients who admitted to Ankara Numune Education and Research Hospital Cardiology Department with chest pain and moderate cardiovascular risk between January 2012 and June 2012, were enrolled to the study. Multislice computed tomography (MSCT) was performed and CACS was calculated according to Agatston's Calcium Scoring. The patients were divided into two groups according to CACS; more or less than 100. EATV was calculated by MSCT. The patients with different tomography imaging protocols and suboptimal imaging quality, with arrhythmia and anemia were not included to the study.

**Results:** Demographic and clinical characteristics of study population are given in table 1. The ratio of patients with EATV more than 167,3 cm<sup>3</sup> was significantly higher in the group of CACS more than 100 according to the group of CACS less than 100 (p<0.001) (Table 2). It was determined that EATV and sex are independent variables for distinguishing CACS >100 and <100 groups (Table 3). In EATV > 167,3 cm<sup>3</sup> group, the probability of CACS >100 was 4,682 times higher than EATV<167,3 cm<sup>3</sup> group (95% CI: 1,298-16,892) (Table 3). The probability of CACS >100 was significantly higher at men than women (OR: 5,984; 95% CI: 1,237-28,958).

**Conclusion:** In this study it was shown that there is a significant association between EATV and CACS. With this study we demonstrated a closer association between CACS and EATV especially over a cutoff value. We think that, EATV can be used more common at coronary artery disease risk prediction with bigger trials.

#### Demographic and Clinical Characteristics of the patients

Variables	n=99
Age (years)	59,3 $\pm$ 9,1
Age range (years)	40-77
Gender	
Male	42 (%42,4)
Female	57 (%57,6)
Menopause	47 (%82,5)
History of hypertension	70 (%70,7)
Duration of hypertension (years)	10 (1-35)
History of diabetes mellitus	60 (%60,6)
Diabetes mellitus duration (years)	6 (1-30)
History of hyperlipidemia	70 (%70,7)
History of smoking	44 (%44,4)
Diastolic dysfunction	36 (%36,4)
Body mass index (kg/m2)	28,8 $\pm$ 3,8
Waist circumference (cm)	98,6 $\pm$ 10,9
Systolic blood pressure (mmHg)	143,7 $\pm$ 13,2
Diastolic blood pressure (mmHg)	88,6 $\pm$ 10,2
Framingham Score	11 (10-18)
Left ventricular ejection fraction	63 (58-72)
Epicardial adipose tissue volume (cm <sup>3</sup> )	120 (47,0-277,3)
Coronary artery calcium score	
0-10	56 (%56,6)
11-100	18 (%18,2)
>100	25 (%25,3)

#### Demographic and Clinical Characteristics of Patients by CACS

Variables	CACS<100 (n=74)	CACS>100 (n=25)	p-değeri
Age (years)	58,7 $\pm$ 9,2	61,2 $\pm$ 8,8	0,251
Gender			0,003
Male	25 (%33,8)	17 (%68,0)	
Female	49 (%66,2)	8 (%32,0)	
Menopause	42 (%85,7)	5 (%20,0)	0,137
History of hypertension	56 (%75,7)	14 (%56,0)	0,062
History of diabetes mellitus	44 (%59,5)	16 (%64,0)	0,688
History of hyperlipidemia	53 (%71,6)	17 (%68,0)	0,867
History of smoking	30 (%40,5)	14 (%56,0)	0,179
Left ventricular diastolic dysfunction	23 (%31,1)	13 (%52,0)	0,060
Body mass index (kg/m2)	29,2 $\pm$ 4,0	27,7 $\pm$ 3,0	0,083
Total cholesterol	205,8 $\pm$ 33,8	218,6 $\pm$ 39,8	0,122
High-density lipoprotein cholesterol	41 (19-64)	38 (27-64)	0,116
Triglycerides	178 (44-683)	197 (63-350)	0,592
EATV > 167,3	12 (%16,2)	12 (%48,0)	<0,001