

**Table 2.** Linear regression analysis demonstrating the relationship between post-interventional myocardial blush grade and selected variables

Variables	Standardized coefficient $\beta$	P value
Mean platelet volume	0,598	<0.001
Diabetes	0,042	,354
WBC count	0,108	,018
Time to intervention*	0,004	,927
Creatinine	0,018	,698
Smoking	0,099	,031
LAD artery involvement	0,049	,285

\* Time from onset of symptoms to intervention

LAD: Left anterior descending artery; WBC: White blood cell count

#### PP-291

##### Serum Hyaluronic Acid Levels are Positively Correlated to the Angiographic Extent and Severity of Coronary Artery Disease

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**Aim:** Hyaluronic acid (HA), an important component of the extracellular matrix which is mainly secreted from the vascular smooth muscle cells, has been demonstrated to accelerate atherosclerosis through enhanced adhesion of leukocytes to endothelial cells. The aim of this study is to investigate the relationship between serum HA levels and the angiographic severity and extent 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 HA levels were determined using the ELISA method.

**Results:** Serum HA levels were significantly higher in the patient group when compared to the control group (1.9 $\pm$ 2.2 ng/mL vs. 1.2 $\pm$ 1.1 ng/mL, respectively; p=0.016). There was a positive and significant correlation between serum HA levels and the Gensini score (r=0.346, p<0.001).

**Conclusion:** Serum levels of HA are higher in individuals with significant CAD when compared to those without, and HA levels are positively correlated to the severity and extent of CAD. The exact role of HA in CAD pathogenesis and its relationship with cardiovascular disease should be elucidated with further studies.

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##### The Association of Plasma Renin Activity With in- Stent Restenosis after Coronary Stenting

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**Purpose:** In-stent restenosis (ISR) occurs in 16% to 44% of patients with coronary artery disease treated with stenting. Clinical studies have suggested that the plasma renin activity (PRA) may play a role in ISR. Angiotensin-converting enzyme inhibitors (ACE-I) have been reported to reduced the rate of ISR. This study aimed to clarify the role of PRA in the development of ISR in patients treated with stenting and already receiving ACE-I therapy.

**Methods:** The study population comprised 52 patients with ISR (group A) and 39 patients without ISR (group B). All patients were treated with ACE-I. In-stent restenosis, was defined as angiographic restenosis (> or = 50% diameter stenosis over one year after the intervention). Patients were excluded if they had heart failure or if they were known to have a low ejection fraction (<40%), uncontrolled hypertension, or overt nephropathy. PRA levels were measured at the time of coronary angiography.

**Results:** The mean patient age was 59 years. Most patients were men (68.1%). Baseline characteristics including drug use were similar between groups (Table 1). No

significant differences was found among patients with and without in-stent restenosis groups with respect to PRA (0.67 $\pm$ 1.6 vs 0.57 $\pm$ 0.9 ng/mL.h, P=0.74).

**Conclusion:** We did not find any relationship between the PRA and angiographic restenosis after coronary stenting.

**Table 1.** Baseline characteristics of the groups.

	Group A (n= 52)	Group B (n = 39)
Age	60 $\pm$ 8	57 $\pm$ 12
Men (%)	35 (67.7)	27 (69.2)
Hypertension (%)	29 (54.7)	24 (45.3)
Diabetes (%)	16 (30.8)	12 (30.8)
LDL-cholesterol (mg/dL)	130 $\pm$ 42	128 $\pm$ 37
Creatinine (mg/dL)	0.99 $\pm$ 0.3	0.92 $\pm$ 0.3

#### PP-293

##### The Relationship between GRACE Risk Score and Epicardial Fat Thickness in Patients with Acute Coronary Syndrome

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**Aim:** GRACE risk score (GS) is a scoring system with prognostic significance in acute coronary syndrome (ACS) patients. Increased epicardial adipose tissue thickness is known to be associated with cardiovascular disorders. A study directly examining the relationship between epicardial fat thickness (EFT) and GS were not found in the literature. In this study, we aimed to assess the relationship between GS and EFT in ACS patients.

**Methods:** We evaluated 162 patients, with non ST segment elevation myocardial infarction (NonSTEMI) between October 2012-February 2013 (115 male, mean age; 66.6 $\pm$ 12.8) in the study. EFT was measured at the end of the diastole and systole with echocardiographic methods. The patients who have high in-hospital GS were included in H-GS group (in-hospital GS>140) and who have high six-month GS were included in H-GS6M group (six month GS>108). Other patients were included in low-moderate GS groups. (LM-GS, LM-GS6M).

**Findings:** The patients in H-GS and H-GS6M groups were older and they also had lower blood pressures. According to the laboratory data, it was detected that c-reactive protein and creatinine increased in H-GS and H-GS6M groups. LDL increased in H-GS group, however there was no significant difference between six-month GS groups. End-systolic and end-diastolic EFT were significantly higher in high-risk groups compared to GS. Systolic functions of H-GS and H-GS6M groups were worse than the low-moderate risk groups (Table 1 and 2). The best correlation was found to be between GS and end-diastolic EFT (in hospital GS, r=0.455; six month GS, r=0.436) (Table 3 and 4).

**Results:** EFT increased in H-GS and H-GS6M groups. EFT values measured at the end of systole or diastole can be used for prognostic assessment of patients with ACS. However, GRACE score and end-diastolic EFT had a better correlation level.