

A 60-year-old male patient presented to our hospital with easy fatigue and shortness of breath. Laboratory studies were normal. Echocardiographic examination showed aortic valve stenosis (mean gradient: 87 mmHg). The ejection fraction was 45–50%. There were no coronary lesions on coronary angiography, while the right coronary artery was observed to originate from the left sinus of valsalva, close the left main coronary artery (Figure 1A). The patient was hospitalized for aortic valve replacement after receiving detailed information regarding the operation.

A median sternotomy was performed under general anesthesia. Following systemic heparinization, cardiopulmonary bypass was initiated with ascending aorta and two-stage cannulation. Cardiac arrest was made with antegrade and retrograde blood cardioplegia. The left and right coronary arteries and the aortic valve were explored after aortotomy. The ostium of the right coronary artery was immediately above the LMCA, and the aortic valve was severely calcified (Figure 1B). The aortic valve was excised and a number 23 mechanical bileaflet valve was implanted. The patient had an uneventful postoperative course and was discharged on the 7th postoperative day.

Surgical treatment can be performed successfully without technical difficulties in patients with coronary artery anomalies.

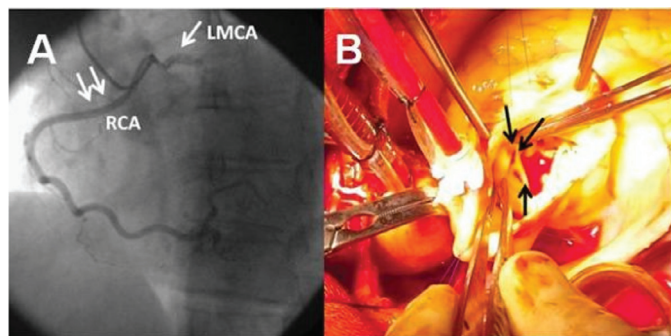


Figure 1. The coronary angiography and intraoperative view show the right coronary artery originating from left sinus of valsalva (A), close the left main coronary artery (arrows) (B). RCA: right coronary artery; LMCA: left main coronary artery.

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ST SEGMENT ELEVATION MYOCARDIAL INFARCTION IN A PATIENT WITH CHRONIC MYELOMONOCYTIC LEUKEMIA WITH INR OF 4.8

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Objective: A 52-year-old male patient was admitted to our clinic with acute-onset chest pain of two hours and electrocardiogram (ECG) reportedly showed sinus rhythm at 60 beats per minute, with ST-segment elevation of 2 mm in leads V1 through V6.

Methods: HE was diagnosed as having acute anterior myocardial infarction. His medical history revealed that he had been given a diagnosis of chronic myelomonocytic leukemia and deep ven thrombosis and was receiving hydra and warfarin maintenance therapy. Findings of physical examination and laboratory tests were unexceptional except for INR value of 4.8 and platelet count 1,100,000,000.

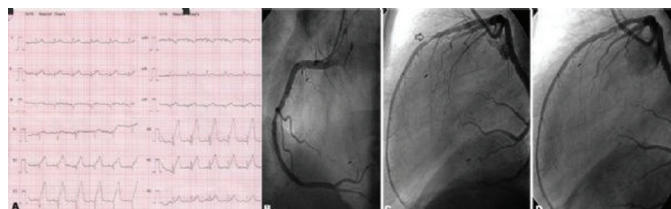


Figure: EKG, angiography.

Results: Angiography of the left system revealed that the proximal LAD was totally occluded with a thrombus and it was successfully revascularized.

Conclusions: In our case, extremely high level of anticoagulation due to warfarin overuse was not sufficient to prevent the development of thrombosis at acute coronary syndrome.

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ELLIS TYPE III CORONARY ARTERY PERFORATION AND EMERGENCY CORONARY ARTERY BYPASS GRAFTING

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Coronary artery perforation is a rare complication of percutaneous coronary interventions. Its incidence is reported to be below 1%. Perforation of a coronary artery may lead to cardiac tamponade, myocardial infarction, and even death. Coronary artery perforation is classified by the Ellis Classification (type I-IV). Type III is also known as “continuous jet-like dye extravasation resulting in hypotension and tamponade”. Reversal of the effect of heparin by protamine, long term balloon inflation, and covered stent implantation are among methods used for the non-surgical management of coronary perforation. Emergency surgical intervention or coronary artery bypass operation may be necessary when these methods fail. In this report, our experience on a patient presenting to our hospital with a myocardial infarction, and who sustained coronary perforation during percutaneous approach and subsequently underwent an emergency pericardial drainage and coronary artery bypass grafting operation, is presented.

A 69-year-old male was admitted to our hospital with chest pain. He had no other risk factors in history except for smoking. An electrocardiogram revealed a previous inferior myocardial infarction. Coronary angiography revealed that the right coronary artery was totally occluded beginning from the origin. A PTCA was planned, however it failed due to chronic obstruction. A coronary artery jet flow was observed during the procedure. The patient was transferred to the coronary intensive care unit. Echocardiography showed accumulation of abundant fluid in the pericardial space. The patient was urgently taken to the operating room due to disturbed hemodynamics. A median sternotomy was performed under general anesthesia. The pericardium was opened and approximately 750 ml of blood was drained. Then, under cardiopulmonary bypass, a bypass to the RCA was performed using a saphenous vein. The postoperative course was uneventful, and the patient was discharged on the postoperative 6th day. Patients with suspected coronary artery perforation should be followed closely. In patients who cannot undergo non-surgical treatment, surgical intervention and coronary bypass operation may lifesaving.

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IS THE DIAGONAL EAR LOBE CREASE ASSOCIATED WITH THE SEVERITY OF CORONARY ARTERY DISEASE?

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Objectives: Physical diagnosis is considered to be a cornerstone in clinical medicine. Examination of the ears is frequently forgotten although, in many clinical situations. A diagonal-ear-lobe-crease (DELC) has been characterized in the medical literature as a marker that can identify high-risk patients having occult atherosclerosis. In the study, we aimed to investigate the relationship between the severity of coronary artery disease (CAD) and DELC.

Methods: This pilot study enrolled 78 patients undergoing elective coronary angiography, mean age 61.1 ± 12.2 years of whom 32 were female and 46 were male. The complete blood count and biochemical examination of blood were obtained after 12 hours fasting. The extent and severity of CAD was evaluated by Gensini score. In each ear, 2 points were given for a deep, clear-cut DELC

that extended entirely across the earlobe, 1 point for an DELC that was noted as superficial or did not extend all the way across the earlobe, and 0 for ears in which an DELC was not observed. The DELC score in each case represented the total points for both ears. Patients were divided into 5 groups according to DELC score (DELC scores: 0, 1, 2, 3, 4 are defined as group 1, 2, 3, 4, 5; respectively). The independent association between DELC score and severity of CAD was statistically evaluated using PASW Statistics 18 for Windows.

Results: Of the patients 62.8% had hypertension, 44.9% had hyperlipidaemia, 28.2% had diabetes mellitus, and 35.9% of them were current smoker. According to Gensini score, 14 of the patients (17.9%) had normal coronary arteries (Gensini score 0), 26 of the patients (33.4%) had minimal CAD (Gensini score 1–19) and 38 of them (48.7%) had severe CAD (Gensini score ≥ 20). Mean Gensini scores were 10.1 ± 22.4 in group 1 (17 patients); 31.7 ± 23.9 in group 2 (3 patients); 29.0 ± 38.2 in group 3 (23 patients); 27.0 ± 30.3 in group 4 (12 patients) and 64.1 ± 39.9 in group 5 (23 patients). According to Mann–Whitney U test there is a significant relationship between group 1 and group 5 ($p < 0.001$). Moreover, creatinine clearance values were higher in group 1 when compared to group 5 (119.1 ± 36.6 and 82.2 ± 32.9 , respectively; $p = 0.002$).

Discussion: The presence of DELC (especially in group 5) was significantly associated with the severity of CAD. Comparison of group 1 and other groups will not give the correct result at the moment, due to its small number. The bilateral DELC was an important dermatological indicator of CAD, and it might be a useful diagnostic tool in the clinical examination of patients. For further information about this topic, large scale studies are needed.

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RELATIONSHIP BETWEEN INFLAMMATORY MARKERS AND HEART RATE VARIABILITY IN PATIENTS WITH STABLE CORONARY ARTERY DISEASE

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Background: Coronary artery disease is accepted as an inflammatory process so that utility of variety of inflammatory markers in the follow up is still investigated.

Objectives: The relationship between hsCRP and serum amyloid A (SAA), that are inflammatory markers and heart rate variability, which is accepted as an important predictor of mortality and morbidity, in stable coronary artery disease patients was investigated in this study.

Methods: Study includes 50 stable coronary artery disease patients who did not suffer angina in the last six months. Smokers, patients with diabetes mellitus, malign diseases, chronic renal failure and infectious or rheumatological diseases that can affect inflammatory markers were excluded from the study. Weight, height, body mass index, blood pressure and pulse of the patients was measured and cardiovascular examination was applied to all of them. Blood levels of glucose, HbA1c, cholesterol levels, serum amyloid A and hsCRP were measured. Rhythm Holter recordings of patients were taken. From Holter recordings, LF, HF, LF/HF, VLF, SDANN, SDNN, RMSSD, PNN50 values of patients were compared with each other. The patient divided into 4 groups according to hsCRP levels (Group 1: hsCRP 0.01–0.1 mg/dl, Group 2, hsCRP: 0.1–0.3 mg/dl, Group 3, hsCRP 0.3–0.6 mg/dl, Group 4, hsCRP > 0.6 mg/dl).

Results: There were no significant differences between the four groups in terms of baseline characteristics. Statistically significant reverse correlation was detected between hsCRP and SDNN, LF and VLF parameters (consecutive p values 0.028, 0.040, 0.032). This reverse correlation was more prominent in the group of patients with hsCRP values of 0.3–0.6 mg/dl (Group 3). There was no significant correlation between RMSSD, PNN50, SDANN ratios and hsCRP ($p > 0.05$). Also, there was no significant correlation between SDNN, RMSSD, PNN50, LF, VLF and SDANN parameters

and SAA ($p > 0.05$). Statistical analysis was performed by SPSS for Windows 13.0 software. Categorical data are presented as absolute values and percentages, whereas continuous variables are summarized as mean values \pm standard deviation. Pearson's correlation coefficients were analyzed to examine the association among continuous parameters. Results were evaluated within 95% confidence interval and p values < 0.05 were accepted as significant.

Conclusion: Inflammatory process that play role in the atherosclerosis effects the heart rate variability and the autonomic nervous system.

Table: Relationship between hsCRP and heart rate variability parameters

	Group 1 (n: 9)	Group 2 (n: 22)	Group 3 (n: 15)	Group 4 (n: 6)	p
SDNN (ms)	61.1 \pm 6.27	48.0 \pm 2.96	40.45 \pm 2.84	52.34 \pm 6.90	0.028
RMSSD (ms)	41.83 \pm 11.93	33.71 \pm 5.46	22.24 \pm 2.32	29.66 \pm 5.26	0.249
PNN50 (%)	7.34 \pm 2.12	4.03 \pm 0.91	3.0 \pm 0.91	5.92 \pm 3.03	0.361
LF (ms ²)	645.2 \pm 148	581.9 \pm 155.4	272.2 \pm 44.4	448.5 \pm 175.8	0.04
HF (ms ²)	220.2 \pm 60.2	283.5 \pm 130.1	90.6 \pm 16.5	171.6 \pm 60.9	0.196
LF/HF	3.61 \pm 0.63	4.07 \pm 0.72	4.0 \pm 0.6	3.08 \pm 0.44	0.892
VLF (ms ²)	2493.1 \pm 413.7	1586 \pm 204	1364.7 \pm 172.6	2041.4 \pm 444.5	0.032
SDANN (ms)	119.9 \pm 3.16	108.3 \pm 7.33	94.7 \pm 6.73	100.1 \pm 11.4	0.124

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SPONTANEOUS CORONARY ARTERY DISSECTIONS OF A 57-YEAR-OLD MAN

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Spontaneous coronary artery dissection (SCAD) is a rare cause of acute coronary syndrome and sudden cardiac arrest. The disease is usually seen in young-middle aged woman. The diagnosis of SCAD has been made with coronary angiography. It usually involves a single coronary artery. However few cases of multivessel dissection have been reported. The treatment of acute coronary syndrome subsequent to coronary dissection is still controversial. Percutaneous coronary intervention, bypass surgery or conservative medical management could be considered in the management of patients with spontaneous coronary artery dissection. We describe on a case of SCAD involving right coronary artery (RCA) and circumflex artery in a male presenting with acute coronary syndrome. The present case was followed up medically due to stable hemodynamics, TIMI-3 flow in the dissected arteries and lack of angina.

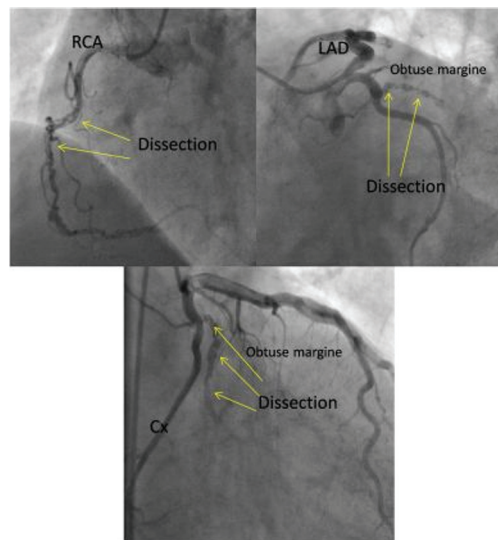


Figure: Coronary angiography demonstrated spiral dissection of RCA and obtuse marginal branch of circumflex.