PERİKARDİT VE ST ELEVASYONLU MI AYIRICI TANISI

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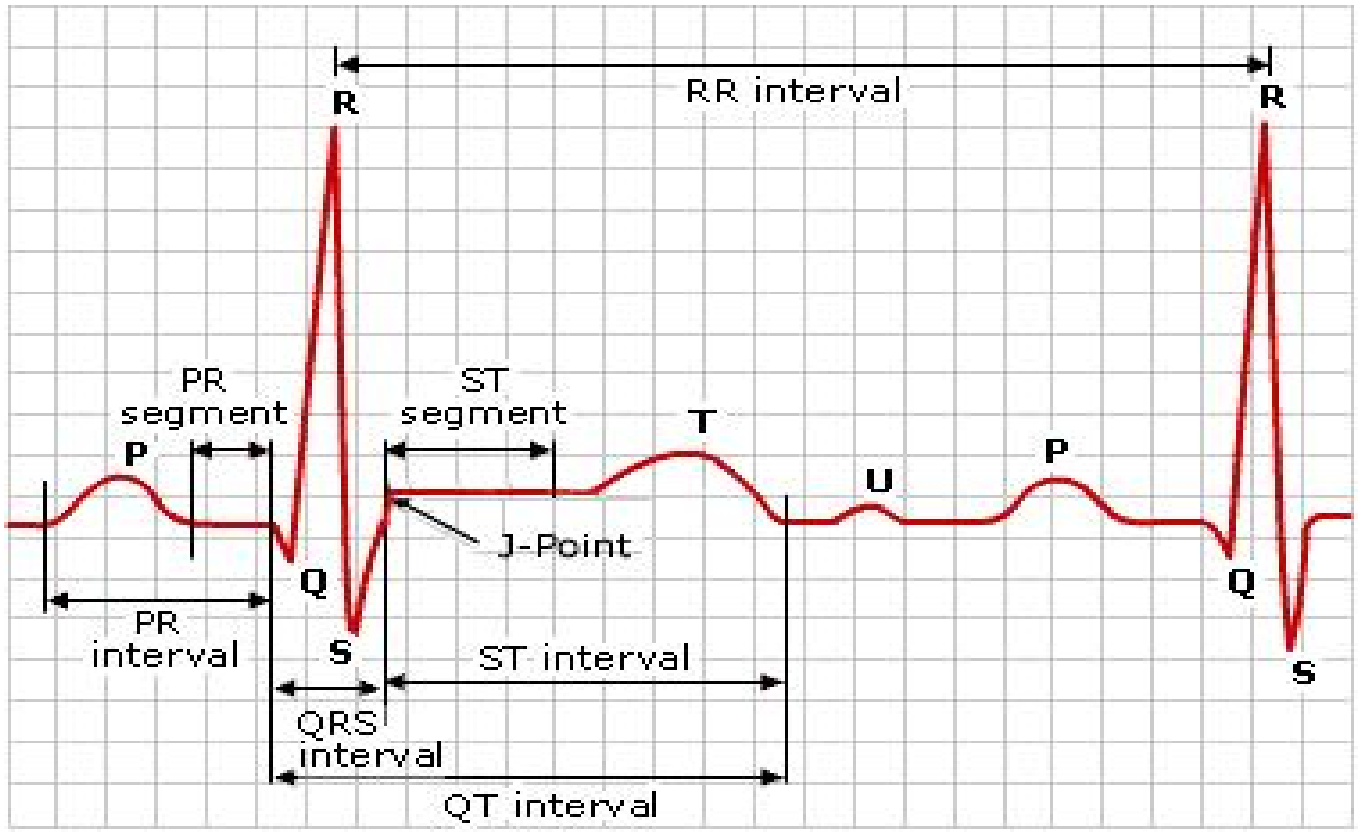
ST-Segment Yükselmesinin Nedenleri

- Miyokard infarktüsü
- Akut perikardit
- Erken Repolarizasyon
- Sol ventrikül hipertrofisi, sol dal bloğu
- Brugada sendromu



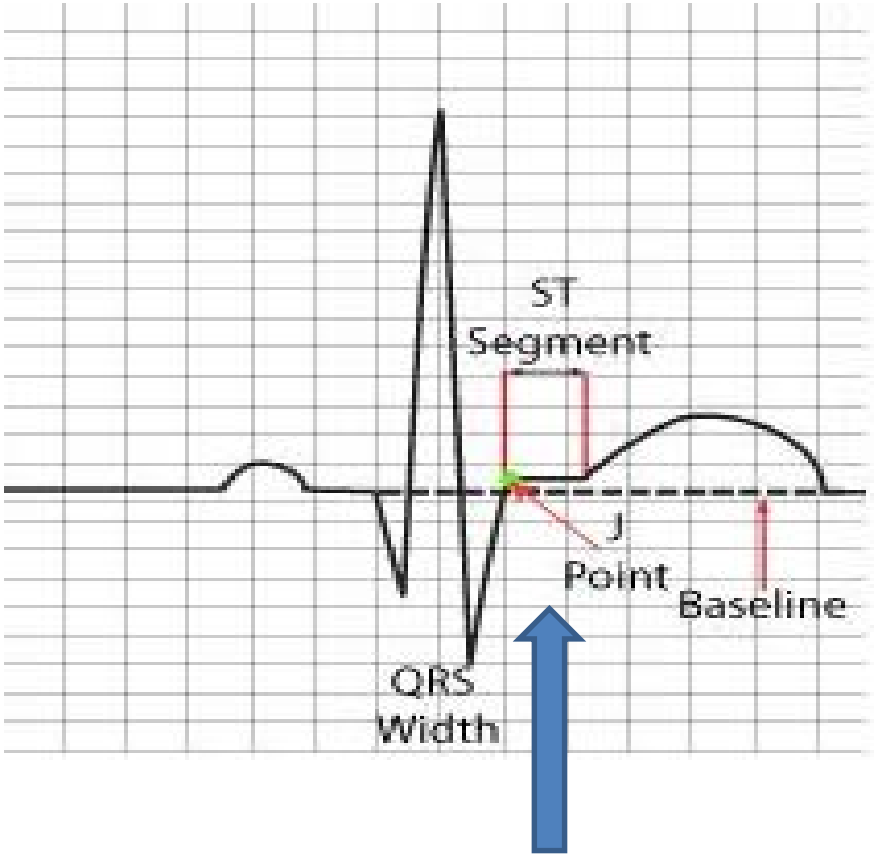
ST segmentini değerlendirmede üç soru önemlidir :

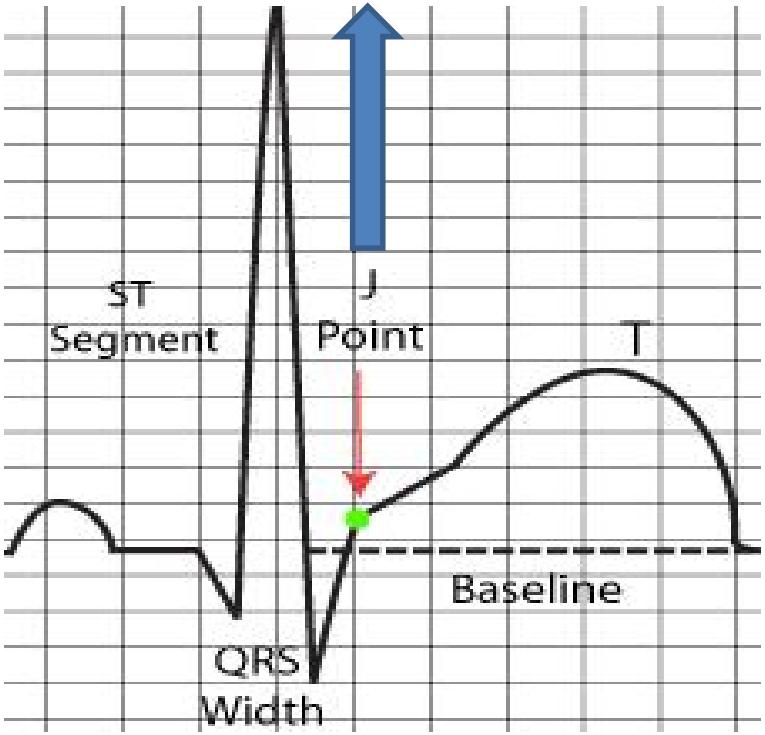
Baseline çizgisi nerede?

J noktası nedir ?

ST segmenti nereden ölçüyoruz ?

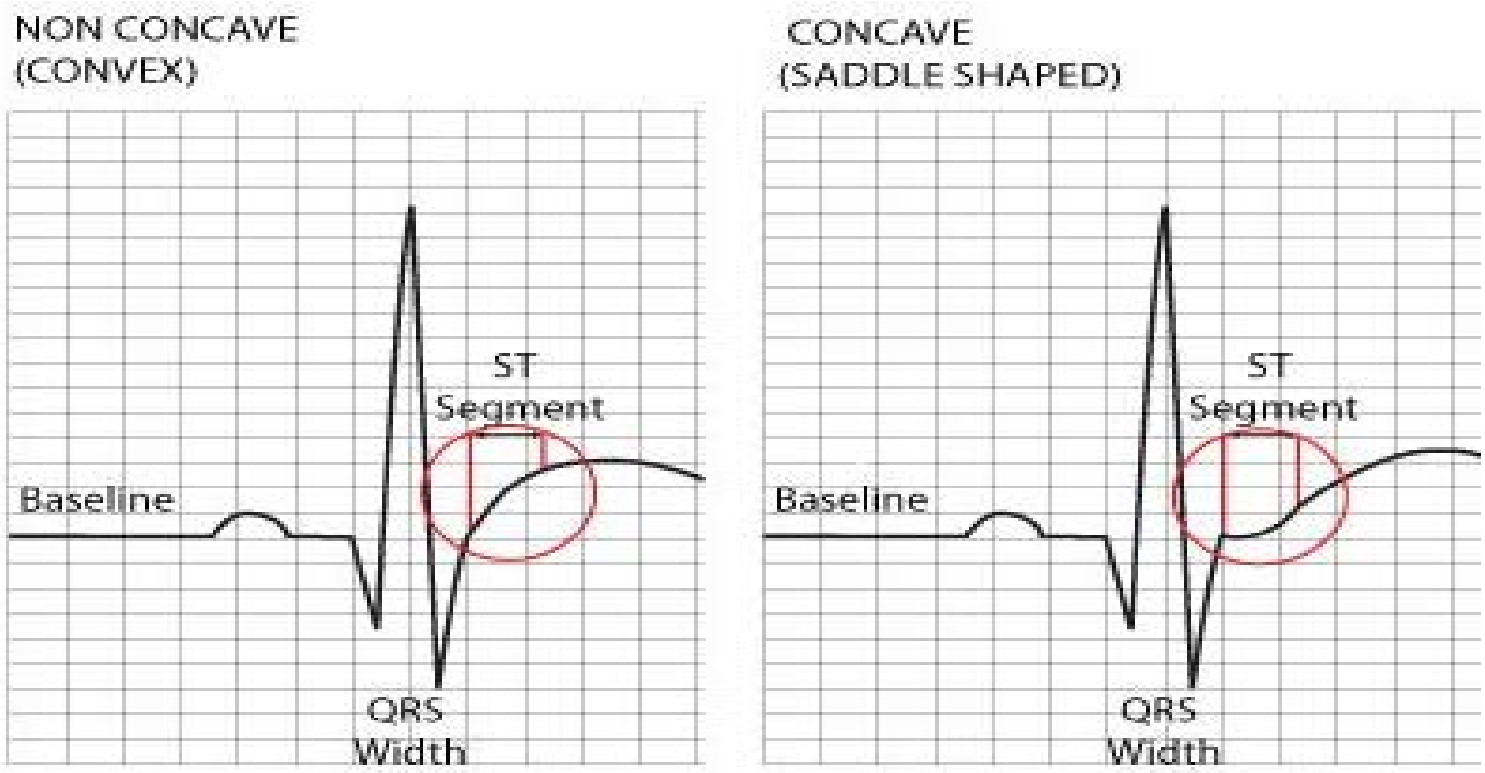
Bu, QRS kompleksi ve ST segmenti arasındaki bağlantı olarak tanımlanır.





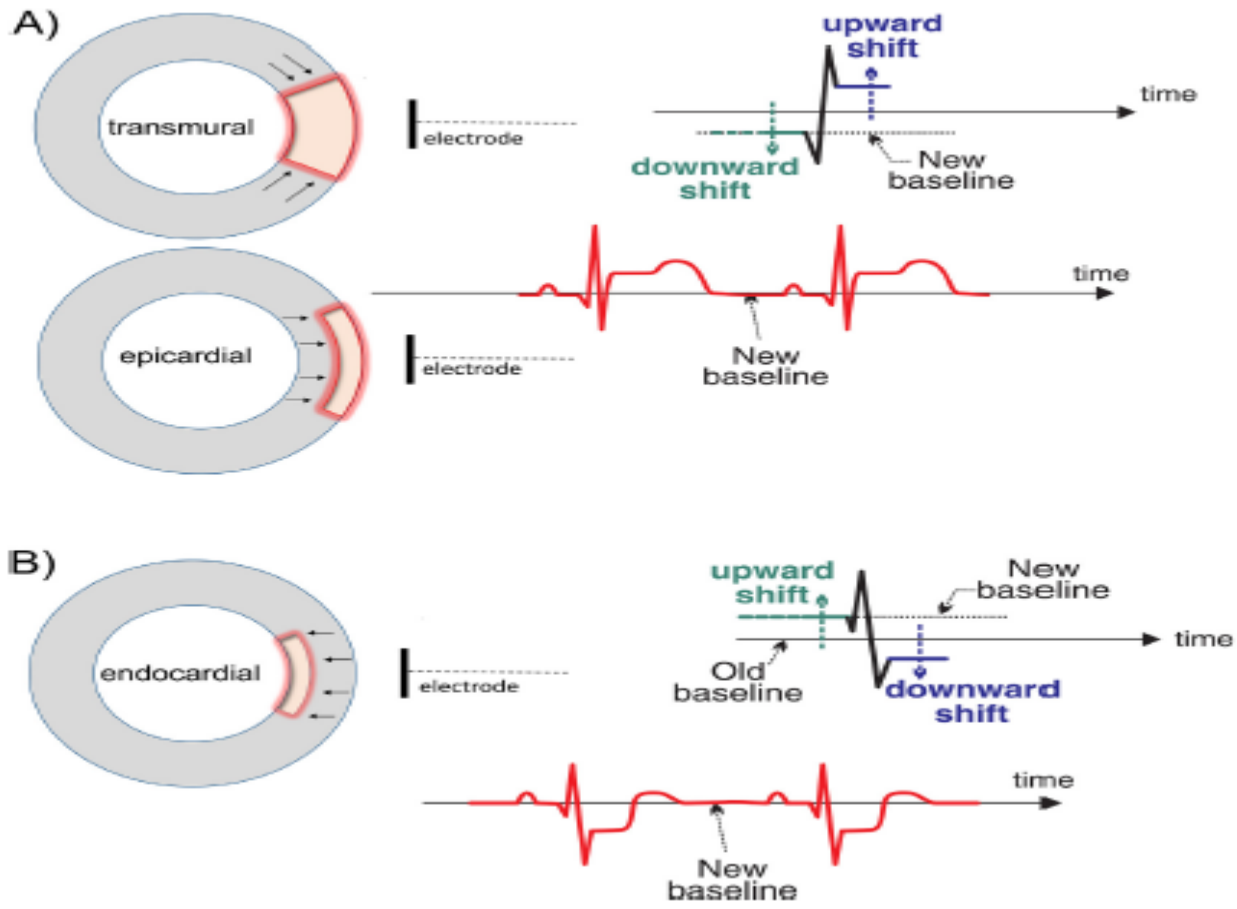
ST segment; ST segmentinin art arda 2 TP segmentini birleştiren bir hattın üstünde 0,1 mV'den daha büyük sapması olarak tanımlanır.

ST segment morphology



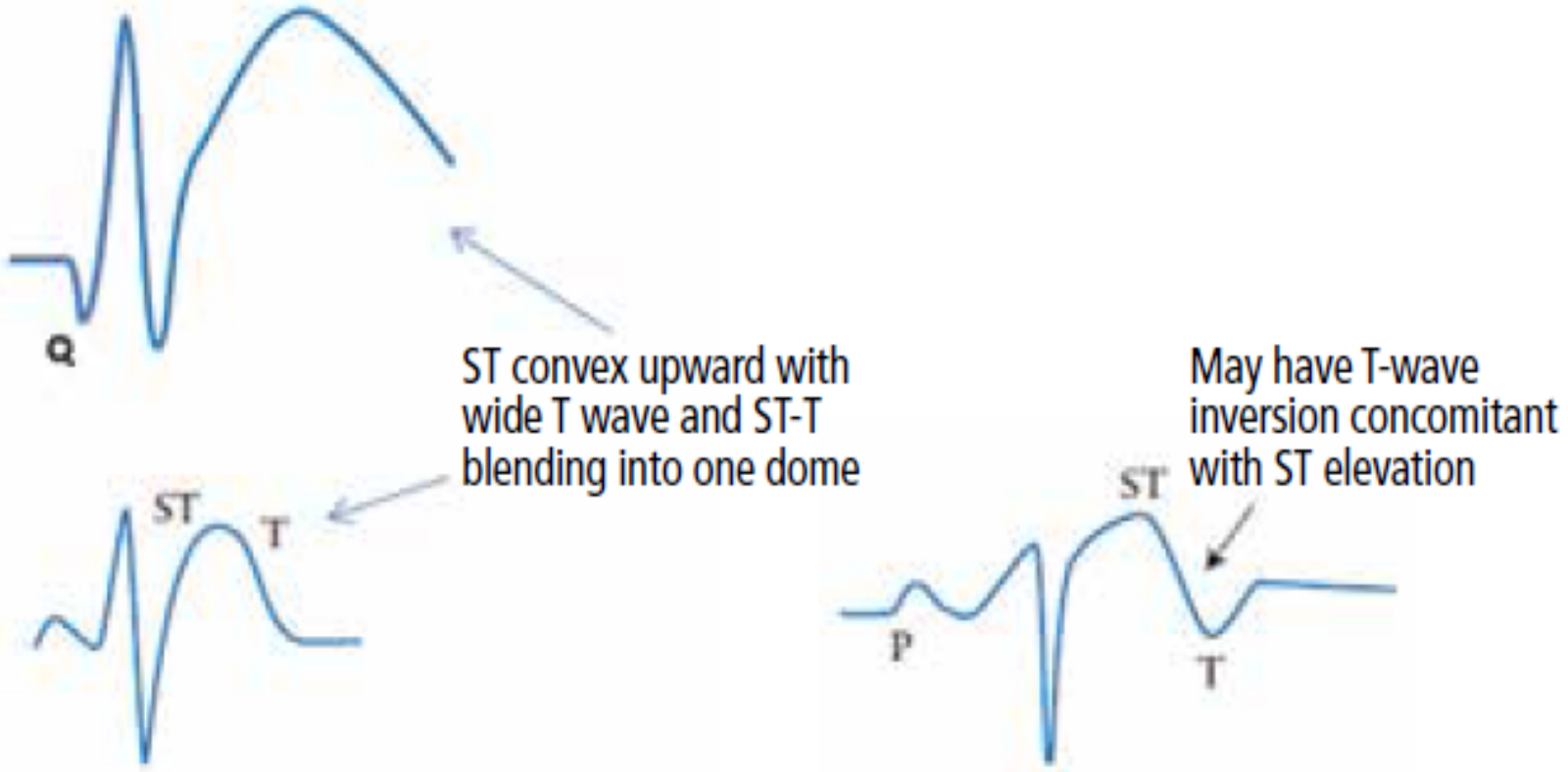
Non-concave (i.e. convex) morfoloji, STEMI tanısı için% 77 duyarlılığa ve% 97 özgüllüğe sahiptir. Bu, AMI için convex veya düz bir morfolojinin “kural olarak” özelliği olarak kullanılabileceği, ancak yalnızca morfolojinin AMI'yi “dışlamak” için kullanılabilecek zayıf bir özellik olduğu anlamına gelir.

ST-Segment Yükselmesinin Elektrofizyolojisi

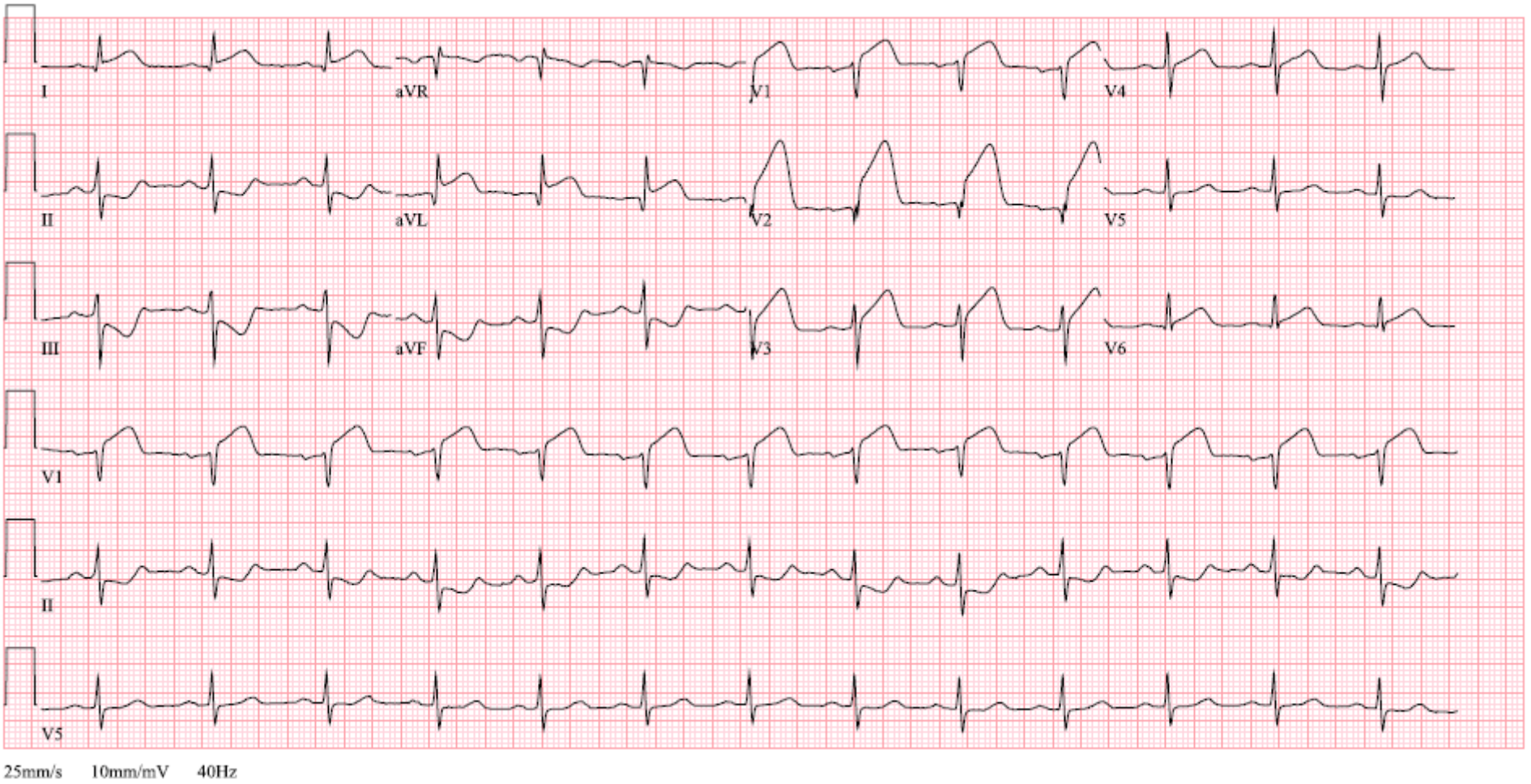


Patterns of ST-segment elevation

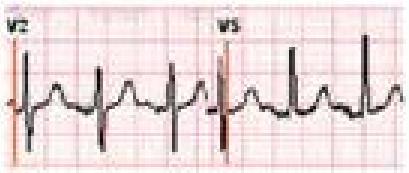
ST-segment elevation myocardial infarction (STEMI)



ST ELEVASYONLU MI-EKG



Tombstoning and Shrinking



Older ECG

ECG 1 hour later

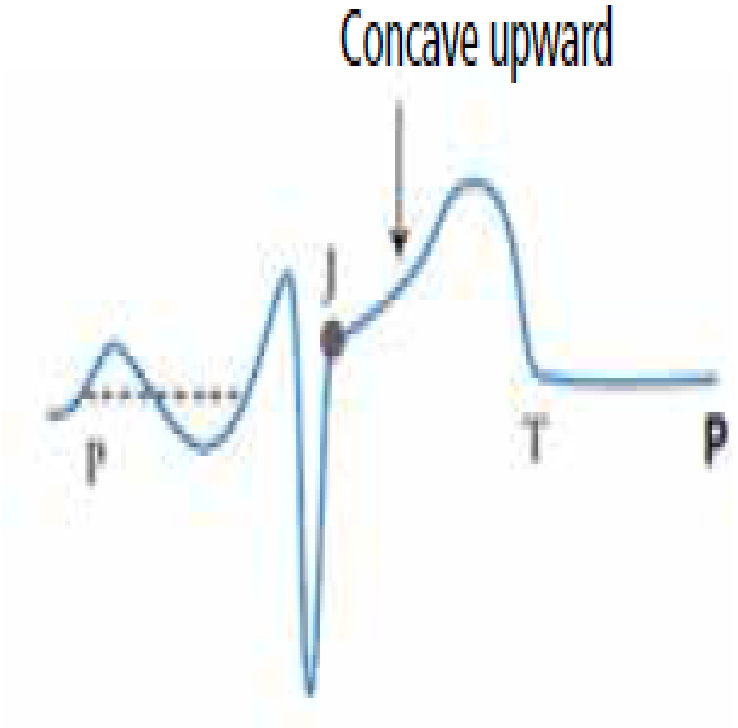
In a patient with lung cancer, sinus tachycardia is seen with diffuse ST-segment elevation, along with ST-segment depression in aVR. The QRS voltage is low, particularly when compared with the electrocardiogram recorded a few days earlier (left lower panel). PR depression is seen in lead II. The combination of these findings may suggest pericarditis with a pericardial effusion. However, the ST-T morphology in lead V_2, where the ST and T are blended to form one dome, is characteristic of STEMI (top arrow). Moreover, the ST elevation and T wave in leads V_2–V_4 are larger than the QRS, the QRS voltage is "shrinking" (arrowhead), and the R wave is pulled up by the ST segment (star); this is called "tombstoning." All these features are characteristic of STEMI, wherein the R wave and the QRS complex shrink before forming a deep Q wave. In fact, an electrocardiogram recorded 1 hour later (right lower panel) shows a fully developed Q wave in lead V_2 (bottom arrow).

Pericarditis

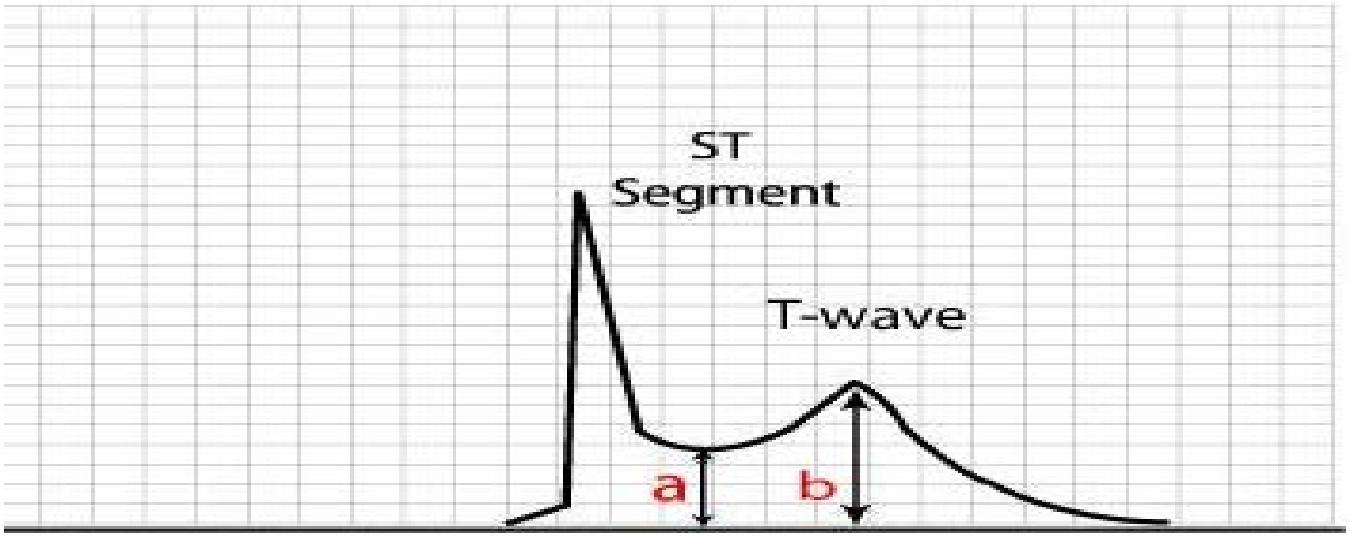
Concave ST elevation

PR depression

ST/T ratio > 25%



ST/T Dalga Oranının Hesaplanması

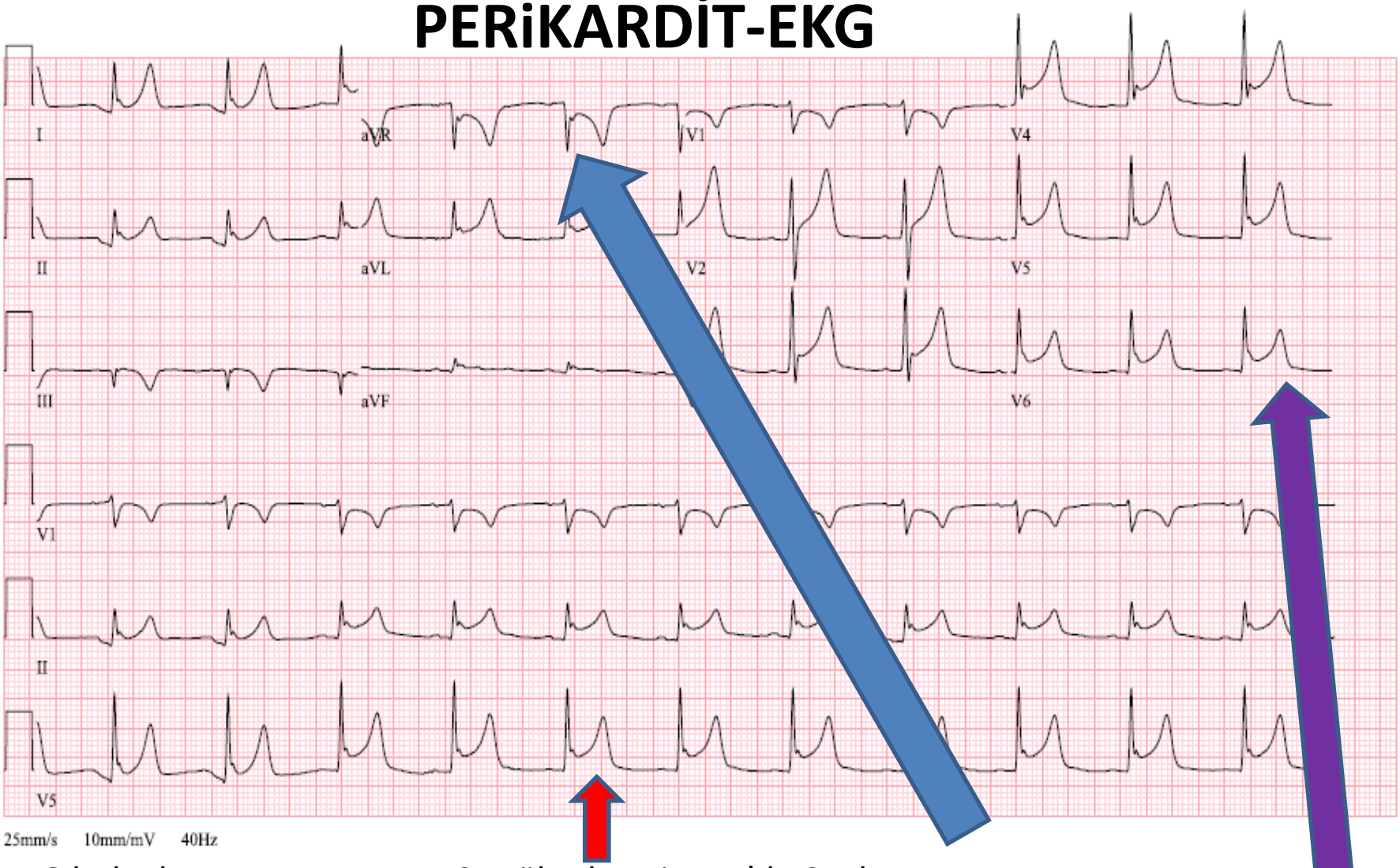


Where a is the height of the ST Segment
and b is the height of the T Wave

$$^{a}/_{b} > 0.25$$

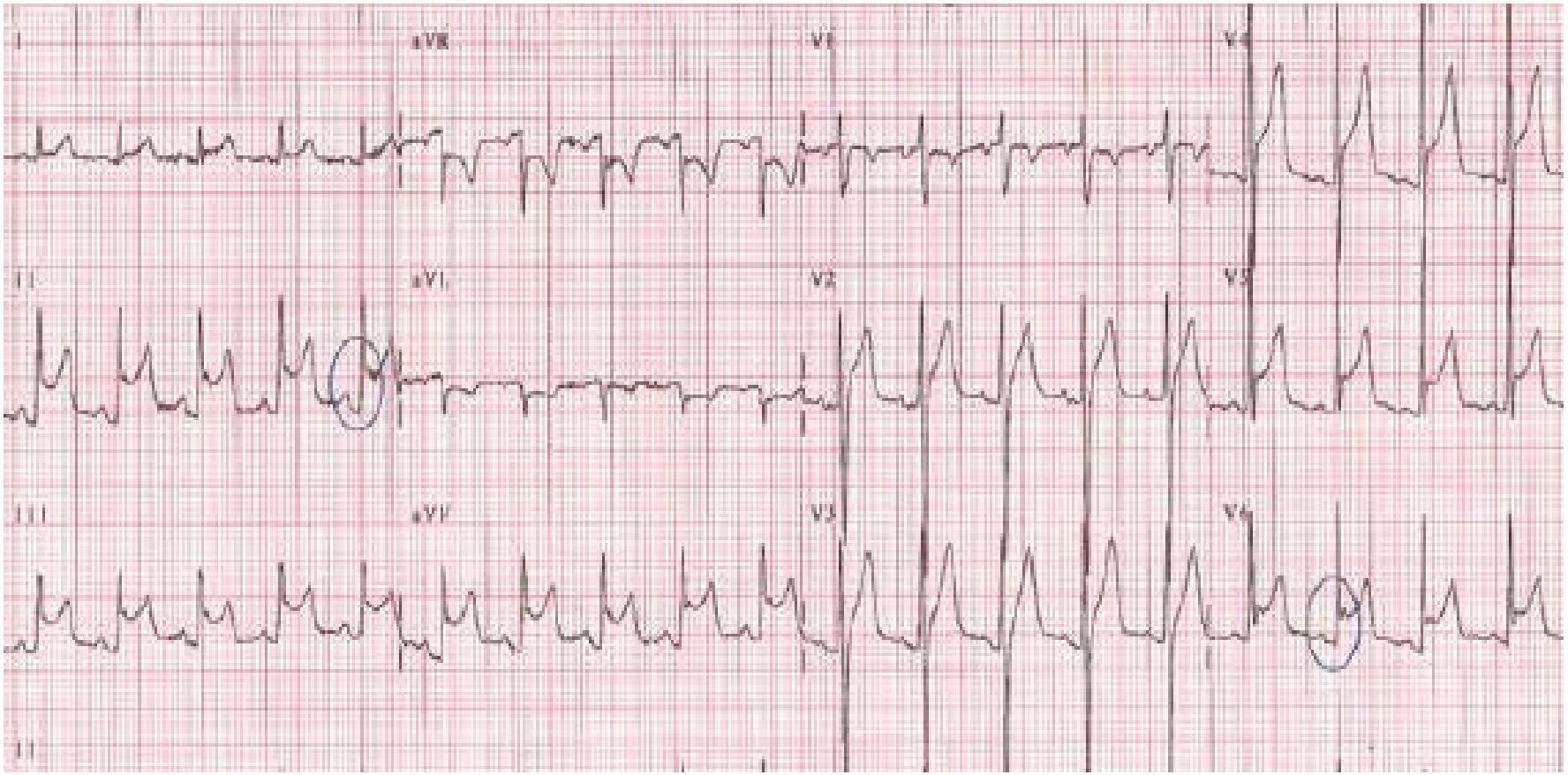
V6'daki ST: T dalga oranı > 0.25 olan Perikardit'i daha olası kılar

PERİKARDİT-EKG



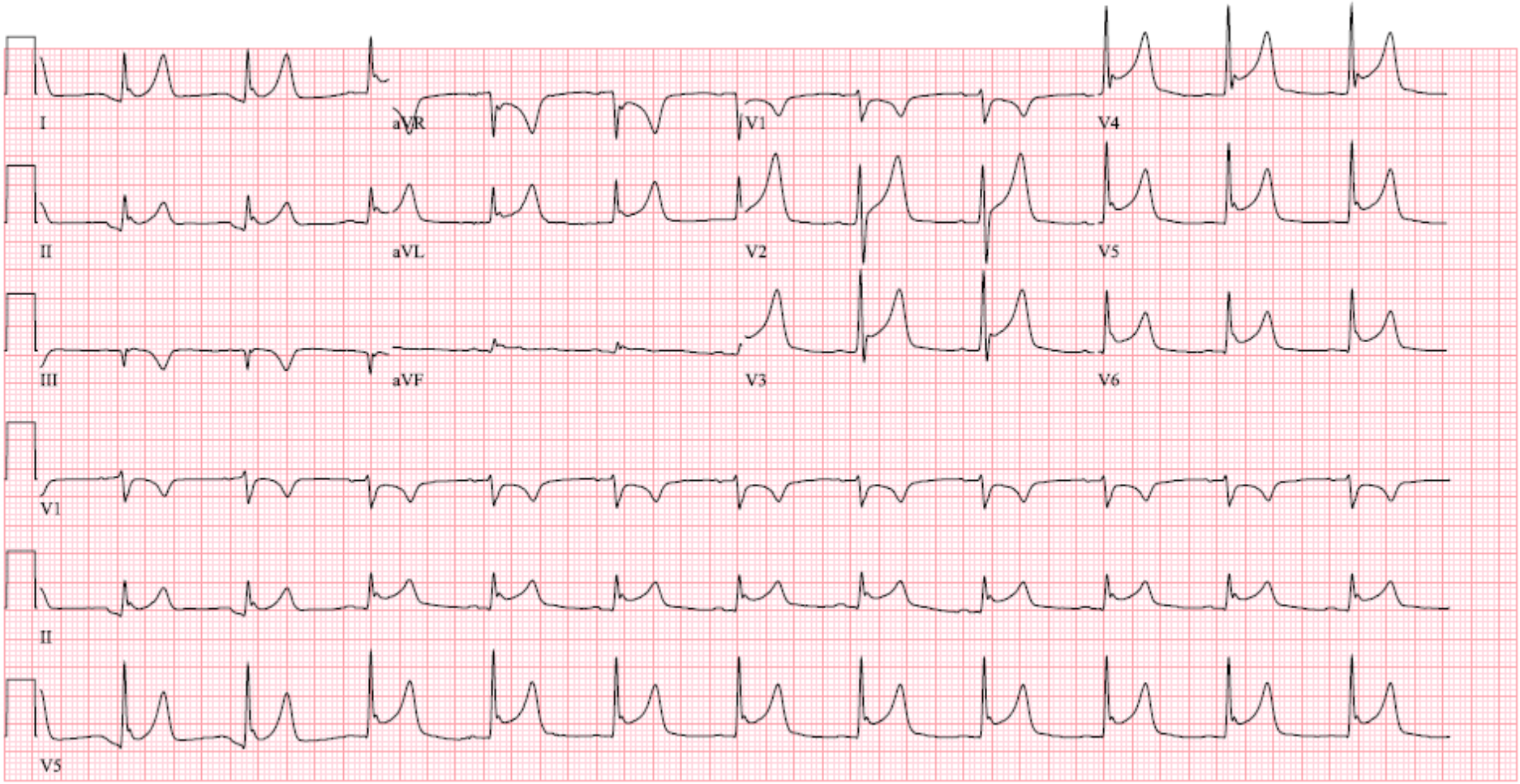
EKG bulguları yaygın concave ST yükselmesi, aVR'de ST depresyonu ve yaygın PR depresyonudur. V6'da ST segmentinin T dalga yüksekliği oranı > 0,25

PERİKARDİT-EKG



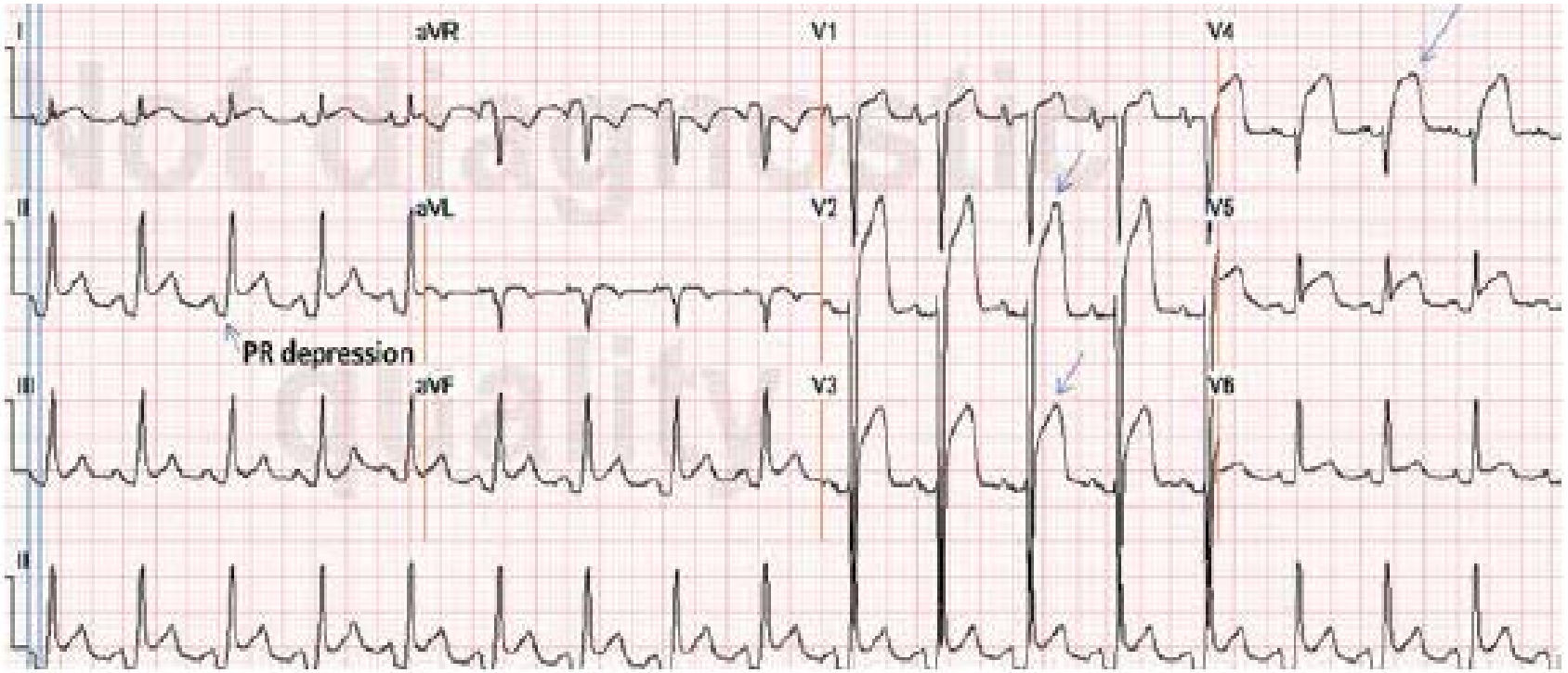
Diffuse ST-segment elevation in most leads, with ST depression in lead aVR and an isoelectric ST segment in V_1. None of the STEMI features are present: ST elevation is concave upward, no reciprocal ST depression is seen except in lead aVR; the T wave is not wide, inverted, or ample (in relation to the QRS complex); and no Q wave is seen. Furthermore, ST elevation does not exceed 5 mm; ST and T heights are smaller than QRS height; and PR depression is present (circled areas). As opposed to early repolarization, the ratio of ST to T in leads V_5 and V_6 exceeds 25%. This is consistent with pericarditis, and the hospital course of this patient confirmed this diagnosis.

PERİKARDİT-EKG



ECG pericarditis. ECG abnormalities suggestive of pericarditis in a 40 year old man with elevated inflammatory parameters and chest pain in supine position and deep inspiration. Echocardiography showed normal left ventricular systolic function with absence of pericardial effusion. After initiation of aspirin the symptoms disappeared and the ECG normalized.

STEMI ? veya Perikardit ?



Diffuse ST-segment elevation with ST-segment depression in lead aVR. This initially suggests pericarditis. PR depression in leads II, aVF, V_5, and V_6 further suggests pericarditis. But the presence of features of pericarditis does not necessarily rule out STEMI. The five STEMI features must be ruled out. In this case, the ST-segment morphology and the abnormally wide T wave are features of STEMI. The ST elevation has an upwardly convex shape with a wide and high T wave fused with the ST segment, typical of STEMI (leads V_2–V_4, arrows). Also, the size of the ST elevation (ie, > 5 mm in V_2–V_4 and larger than the QRS complex in V_4, a feature called "tombstoning") is more consistent with STEMI than with pericarditis. In this patient, the left anterior descending artery was found to be occluded on coronary arteriography.

EKG'de ST Segment Yükselmesi İle İlişkili Olan Durumlar

	ST Görünüşü	Yer	Resiprok	Q Dalgası	T Dalgası
STEMI (Dynamic)	Convex	Bölgesel	Yaygın	+	Hyperacute Large Amplitude
Pericarditis (Dynamic Slower)	Concave/ Saddle Shape	Global	PR depression (aVR fakat aVL(-))	-	ST:T dalga oranı > 0.25

ST Segment Değişimlerinin Dağılımı ve Nedenlerle İlişkisi

Cause	ST elevation Site	Reciprocal Changes
STEMI	Coronary artery distribution	Common
Pericarditis	Diffuse	in aVR not aVL
BER	Chest Leads	in aVR in 50%[12]
Brugada	V1 and V2	No
Ventricular Aneurysm	Mostly Anterior	No

Teşekkürler ..