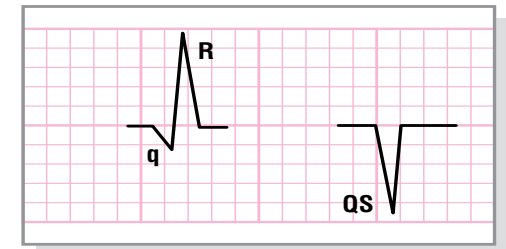


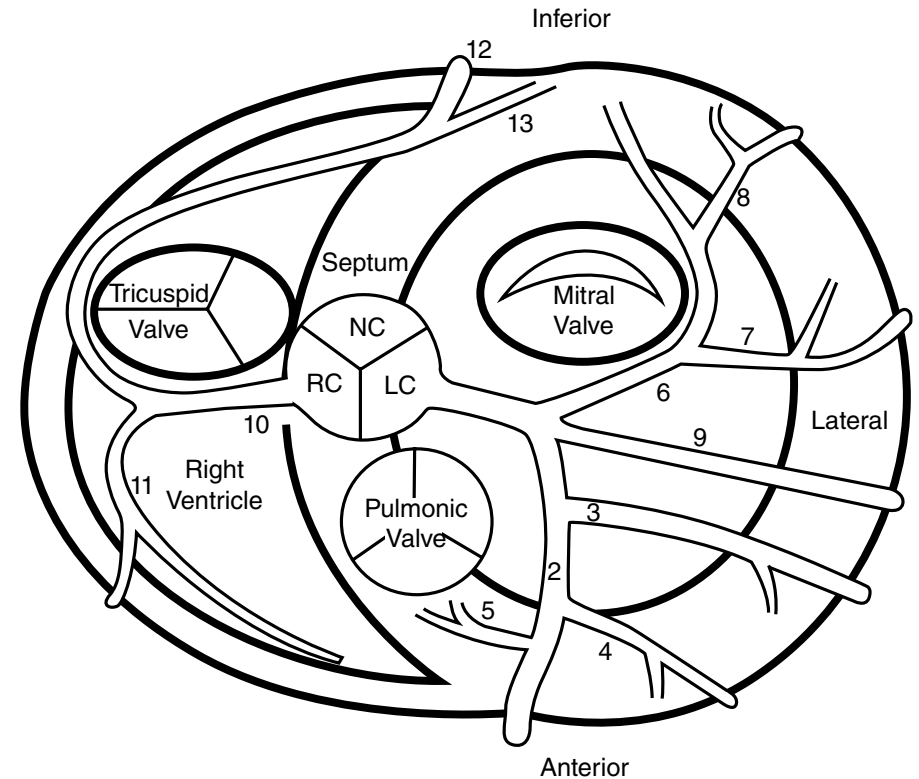
# Anatomía coronaria.

## Localización en Q y elevación STT

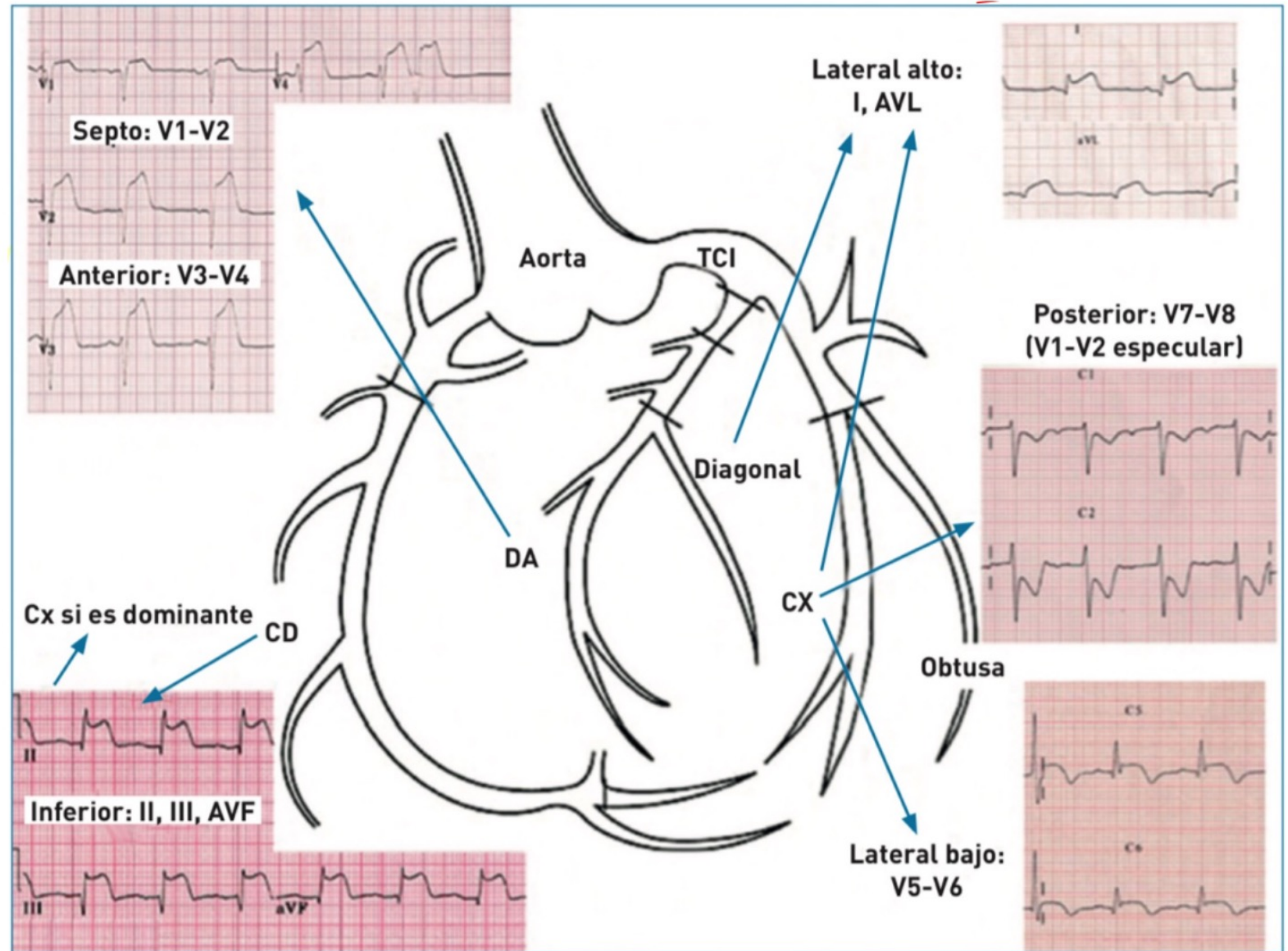
- Anteroseptal: V1 a V3 y a veces V4
- Anterior: V2 a V4
- Anterolateral: V4 a V6
- Lateral: I y aVL
- Inferior: II, III y aVF
- Posterior: R alta en V1 y V2

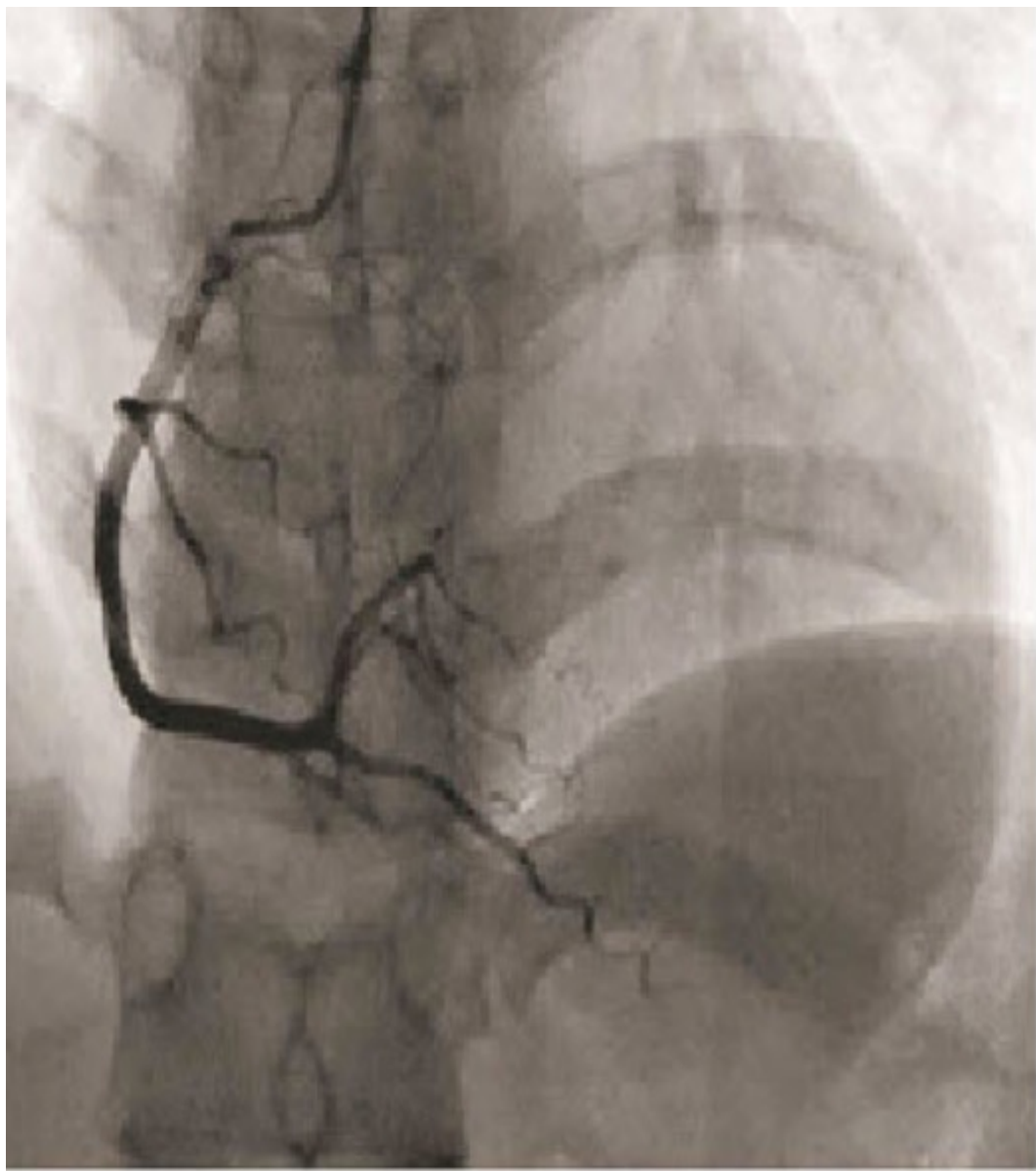


Q wave duration = 1 small box  
= 0.04 seconds

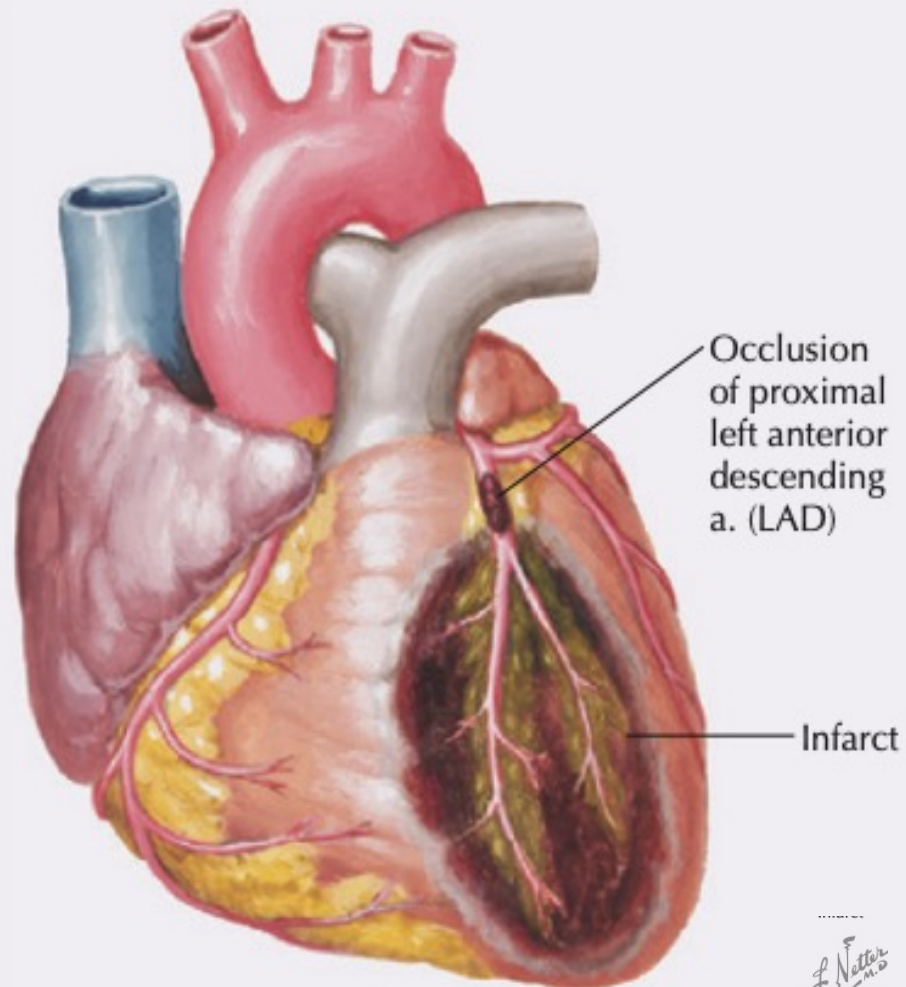


# IAMCEST (STEMI)

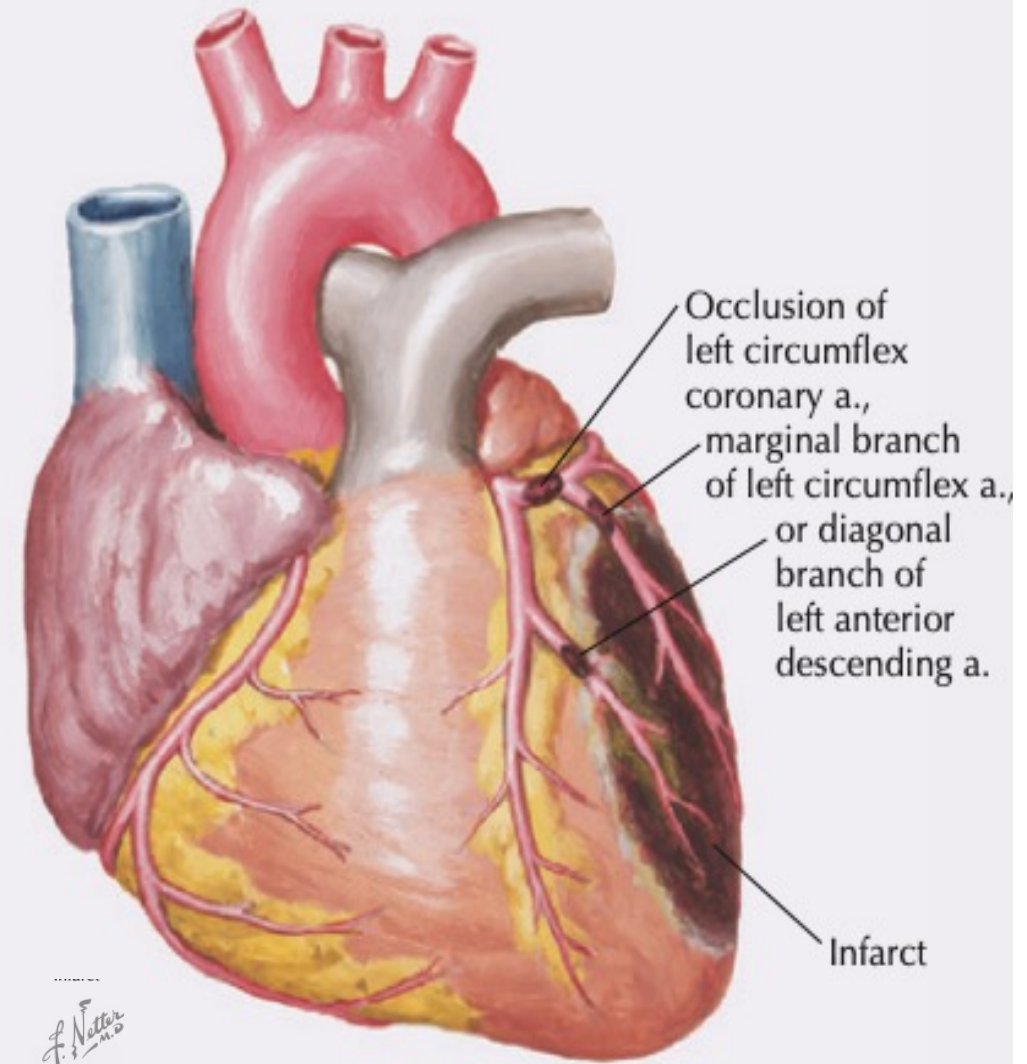




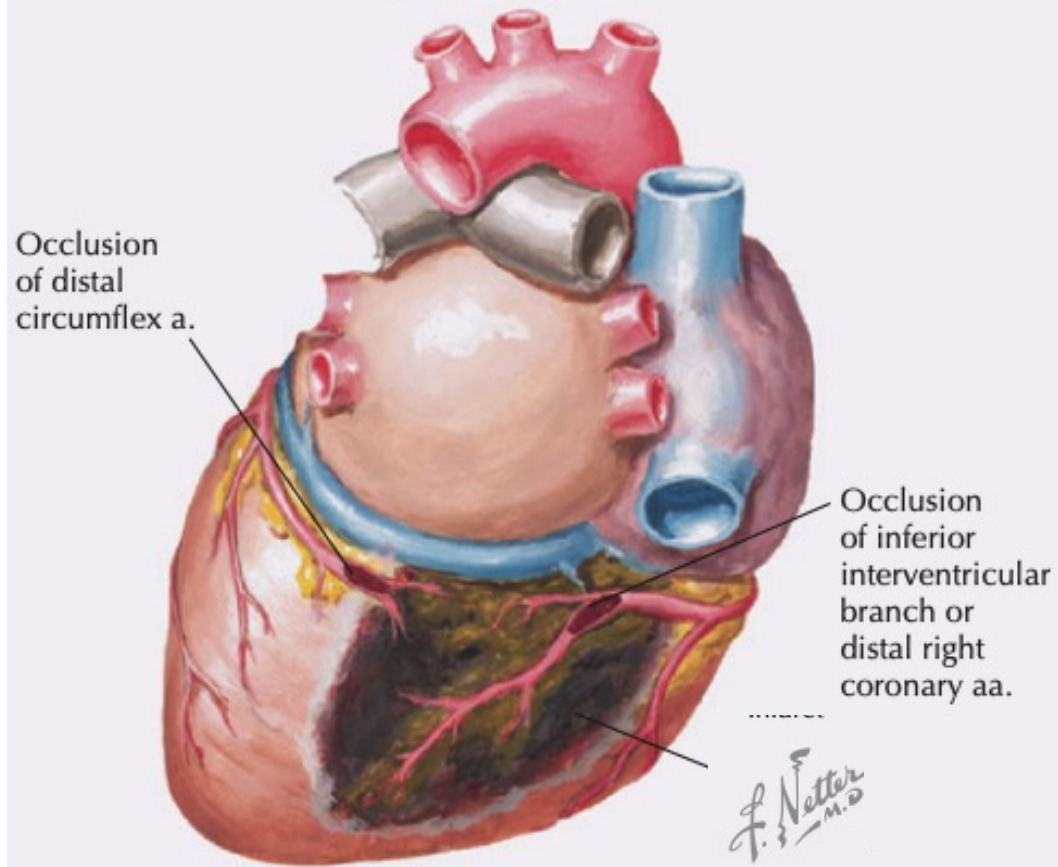
### Anterior infarct



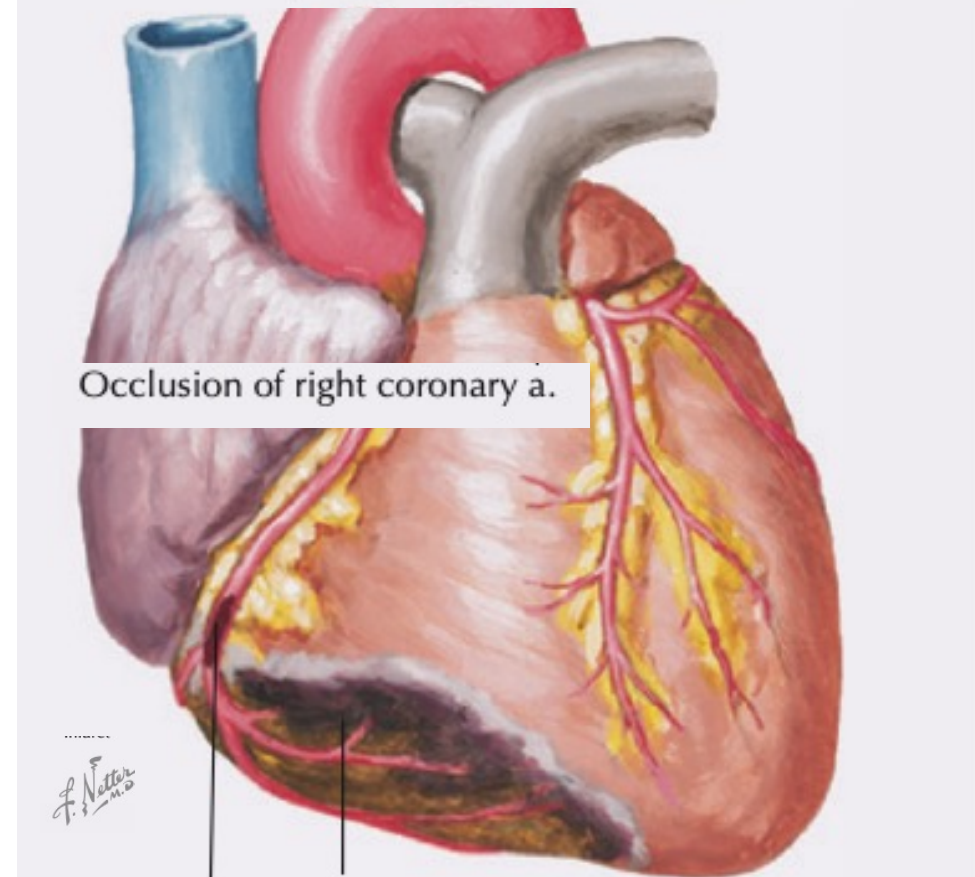
### Anterolateral infarct

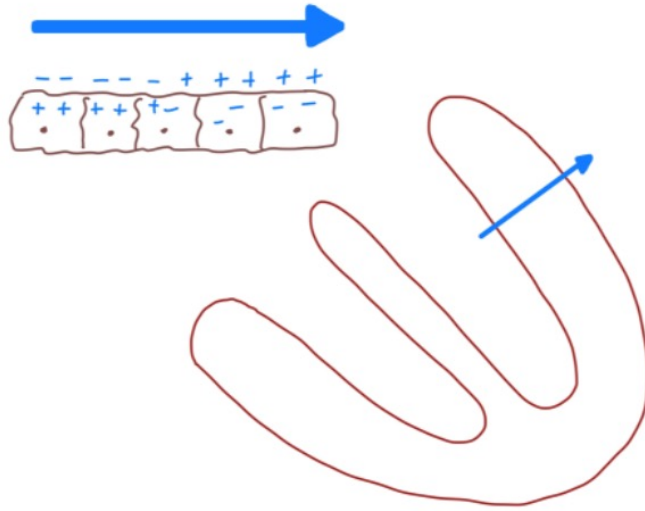


### True posterior infarct



### Diaphragmatic or inferior infarct

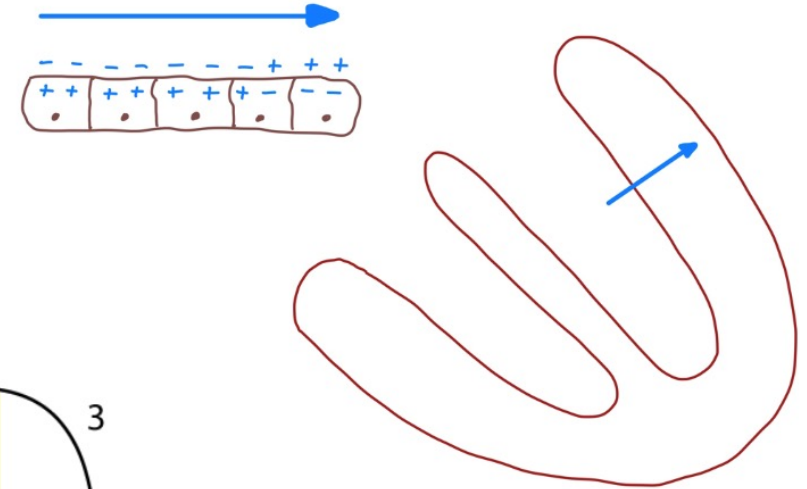
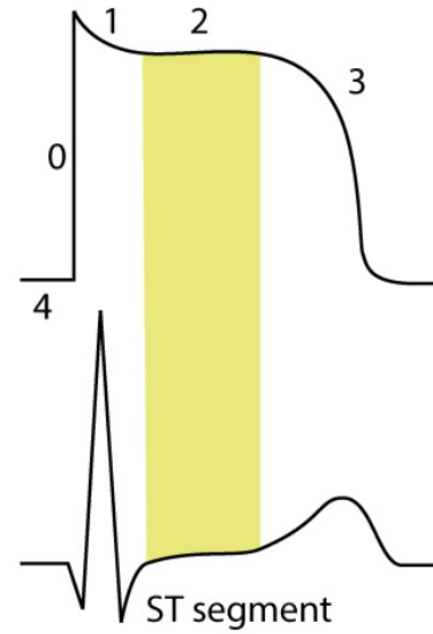




DESPOLARIZACIÓN

Action potential  
in contractile cell

ECG recorded on  
body surface

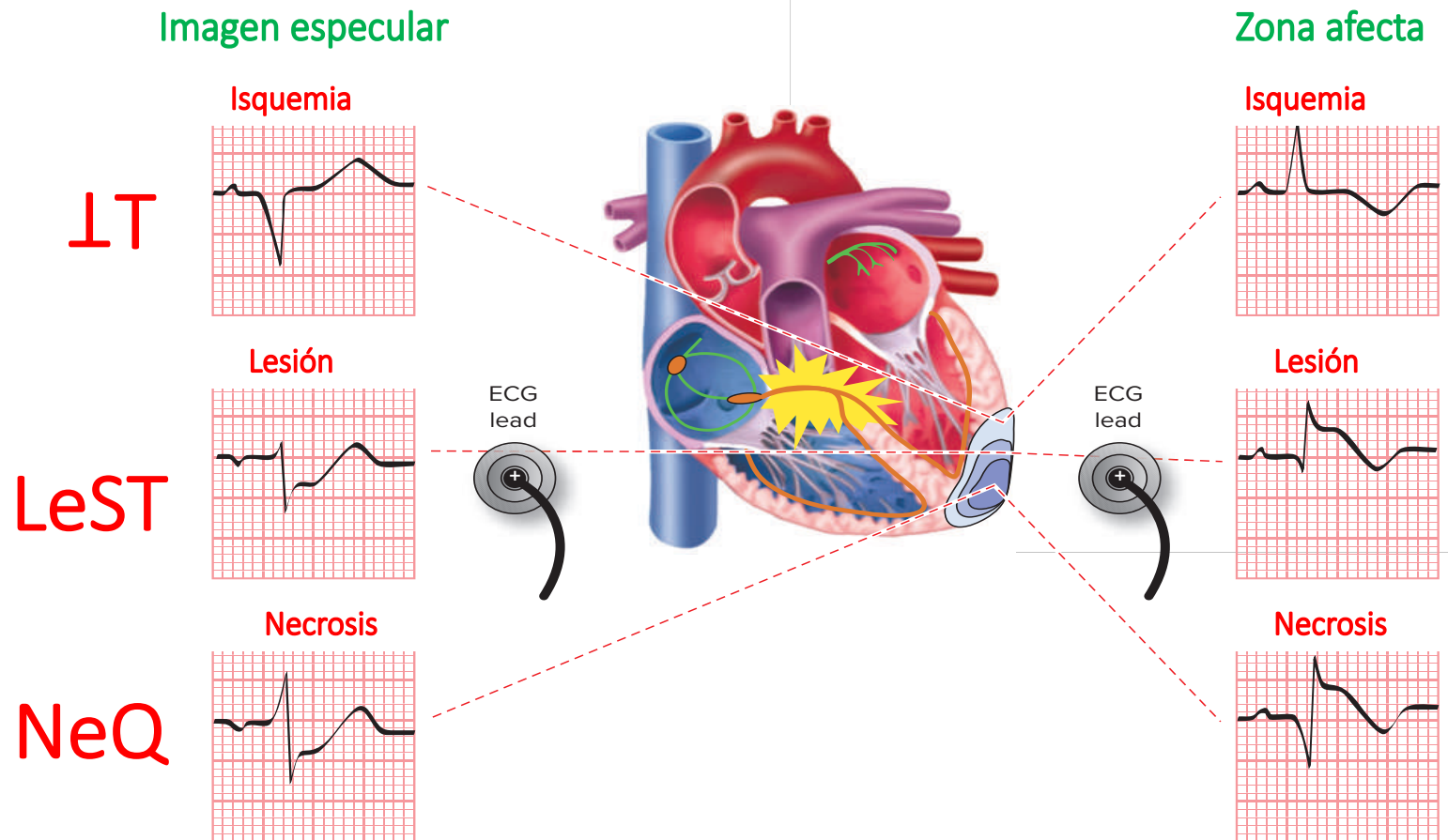


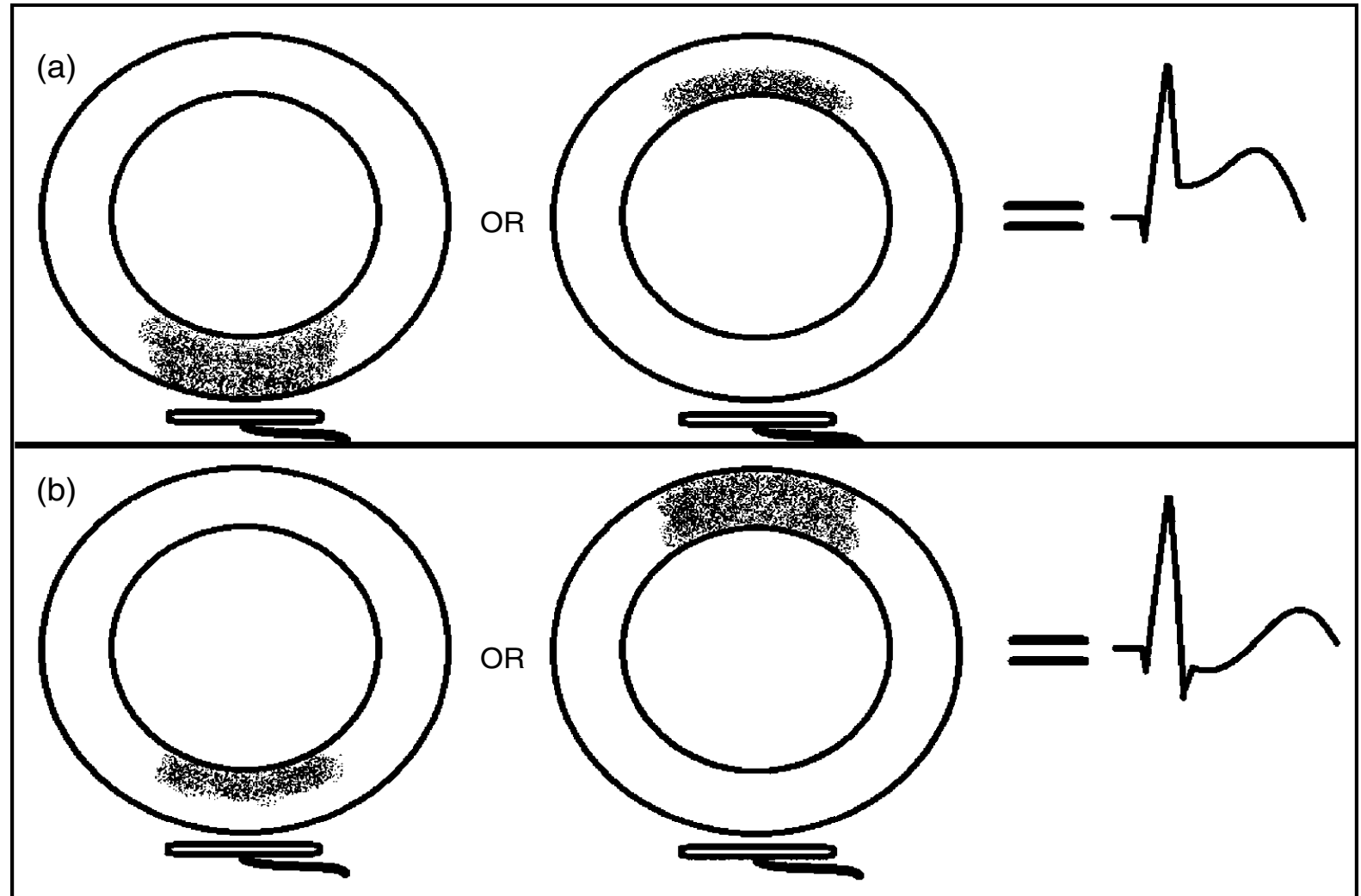
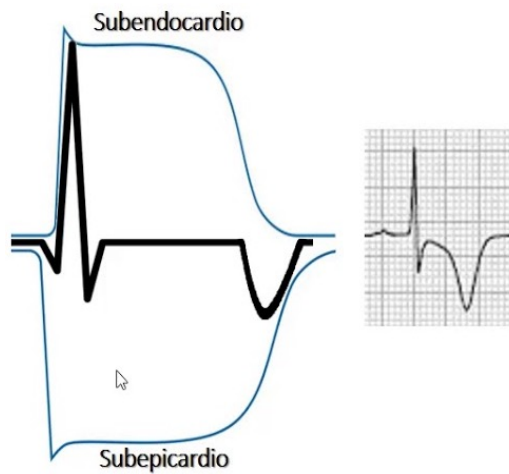
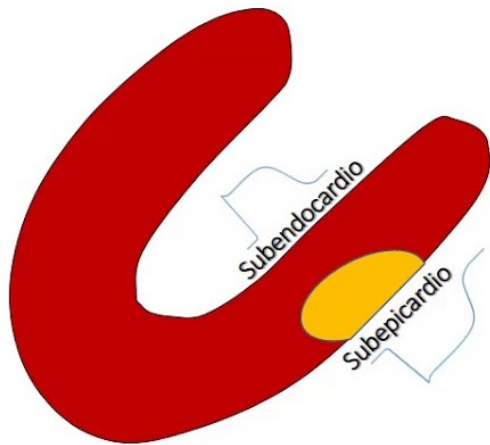
REPOLARIZACIÓN

In the proper clinical context, ST-segment elevation (measured at the J-point) is considered suggestive of ongoing coronary artery acute occlusion in the following cases: at least two contiguous leads with ST-segment elevation  $\geq 2.5$  mm in men  $< 40$  years,  $\geq 2$  mm in men  $\geq 40$  years, or  $\geq 1.5$  mm in women in leads  $V_2$ – $V_3$  and/or  $\geq 1$  mm in the other leads [in the absence of left ventricular (LV) hypertrophy or left bundle branch block LBBB)]. In patients with inferior MI, it is recommended to record right precordial leads ( $V_3R$  and  $V_4R$ ) seeking ST-segment elevation, to identify concomitant right ventricular (RV) infarction. Likewise, ST-segment depression in leads  $V_1$ – $V_3$  suggests myocardial ischaemia, especially when the terminal T-wave is positive (ST-segment elevation equivalent), and confirmation by concomitant ST-segment elevation  $\geq 0.5$  mm recorded in leads  $V_7$ – $V_9$  should be considered as a means to identify posterior MI.

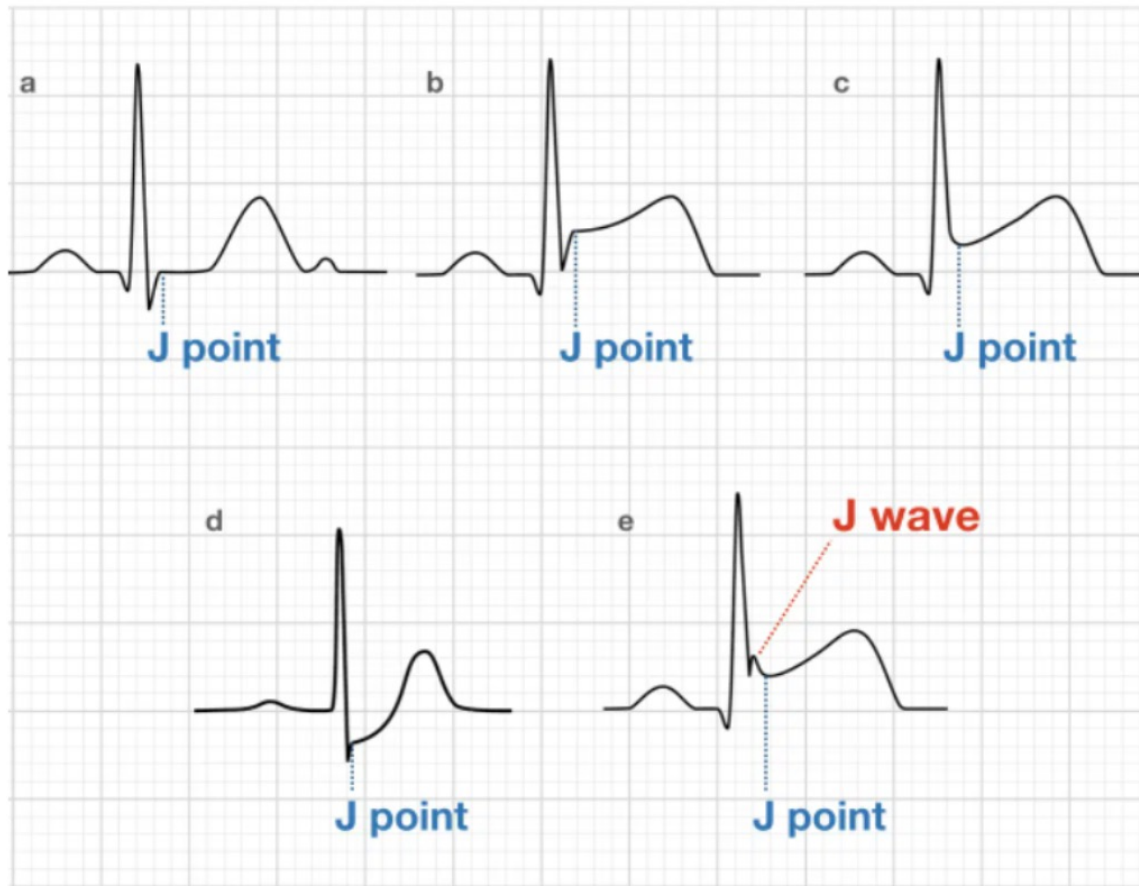
# Las zonas contiguas y puntos de mira

You cannot imagine what little details these cardiologists are looking at ...!





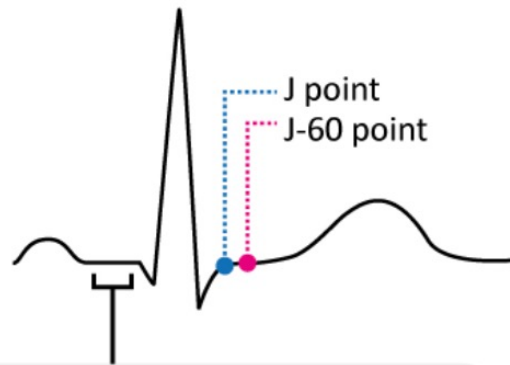
Isquemia subepicárdica



J point in a) normal; b) c) J point elevation; d) J point depression; e) with J wave (Osborn wave)

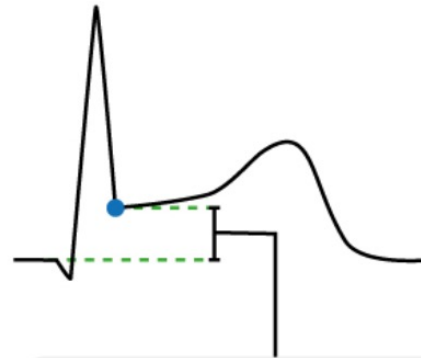
The **J (junction) point** in the ECG is the point where the QRS complex joins the ST segment. It represents the approximate end of depolarization and the beginning of repolarization as determined by the surface ECG. There is an overlap of around 10ms.

## Measurement points



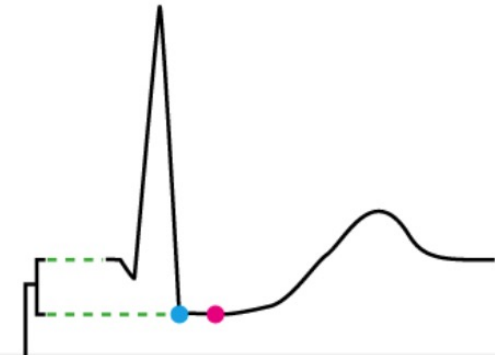
The PR segment is the baseline (reference line) for measuring deviation of the ST segment.

## ST segment elevation



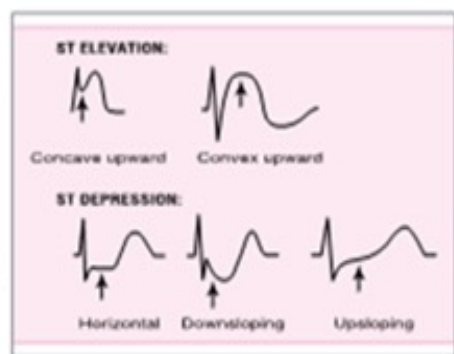
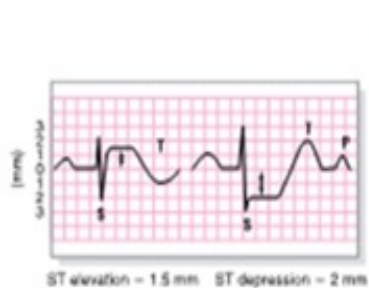
The magnitude of ST segment elevation is measured in the J point.

## ST segment depression

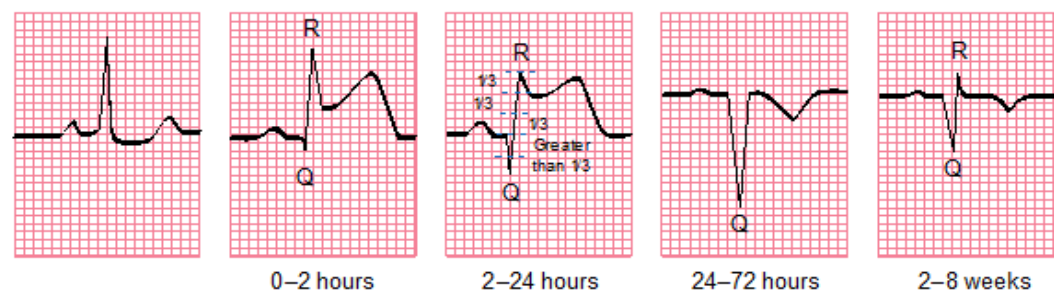


The magnitude of ST segment depression is measured in the J point in most instances. Occasionally it is advised that the J-60 point be used instead (particularly during exercise stress testing). If the ST segment is horizontal, then there is no difference in the magnitude of the ST depression in J and J-60.

# Cambios de STT



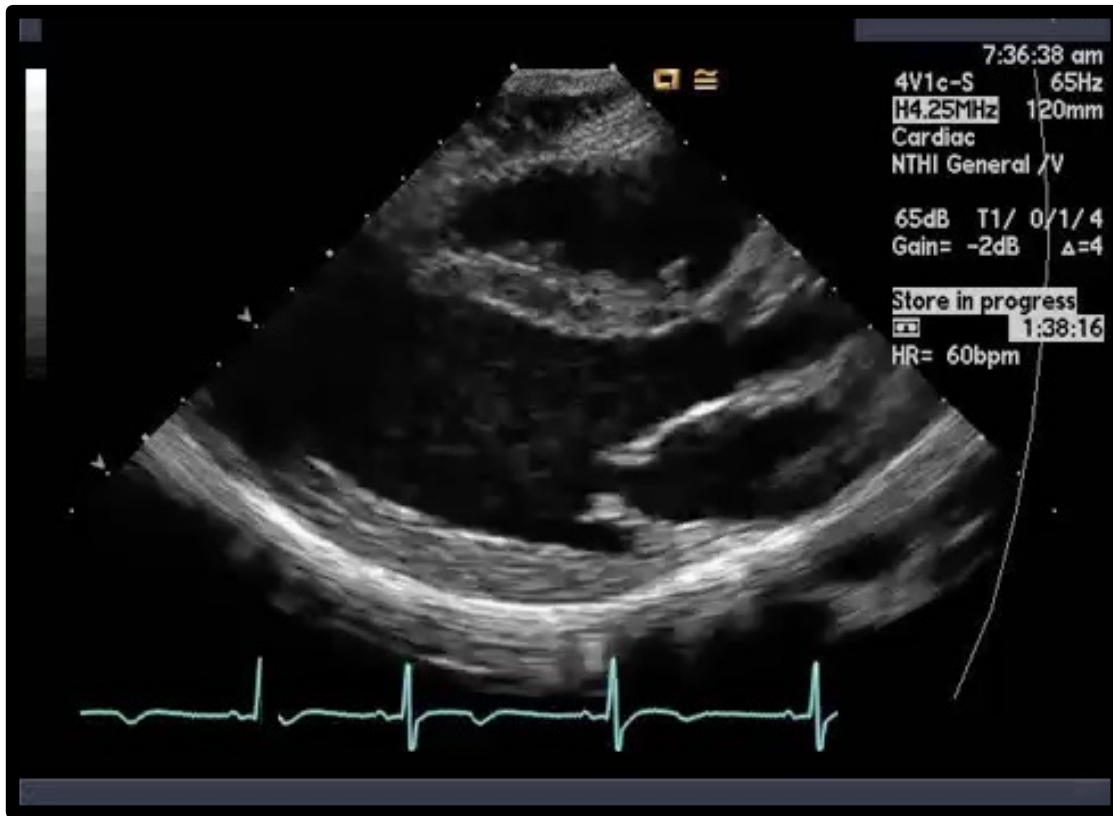
## Evolución del IAM con onda Q



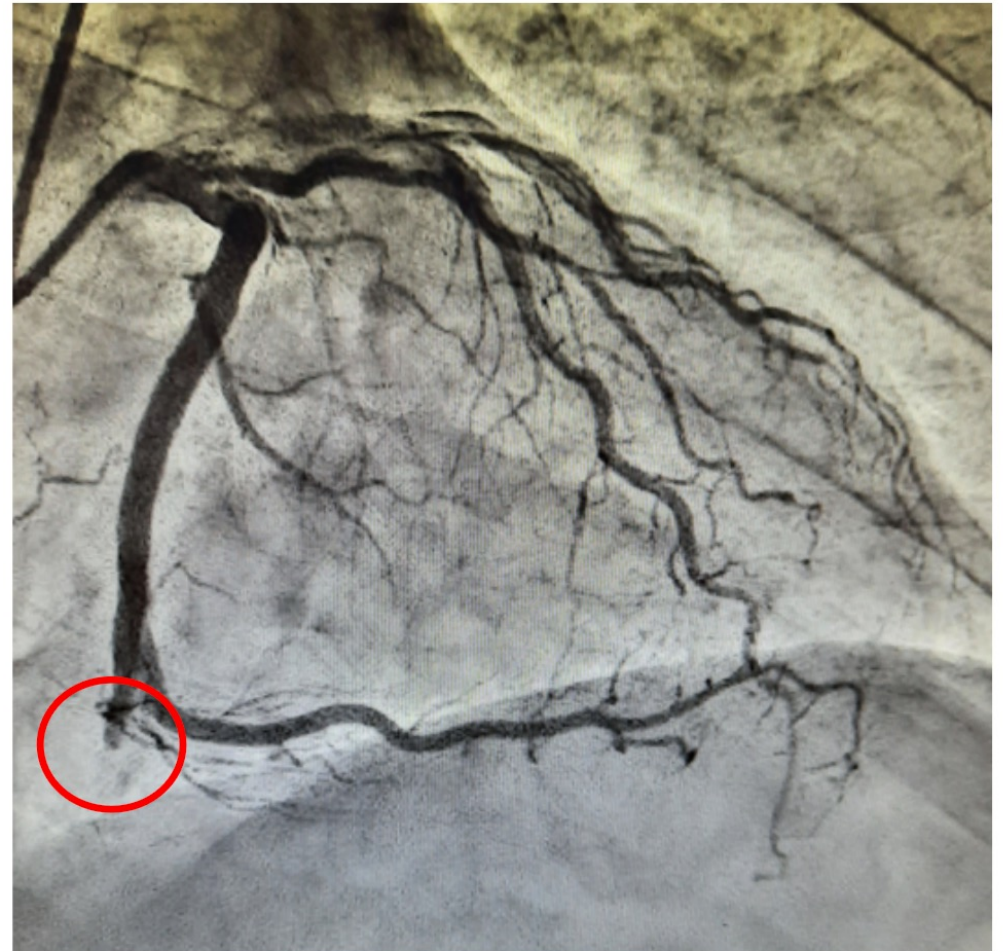
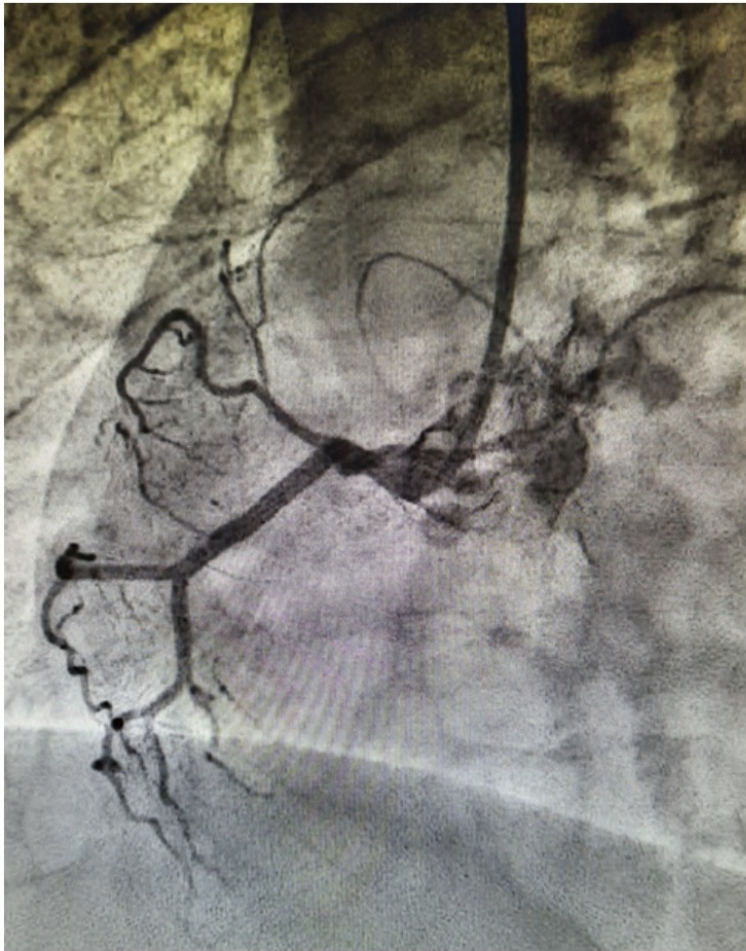
# ELEVACIÓN ST

- IAMCEST
- ANGINA VASOESPÁSTICA (PRINTZMETAL)
- PERICARDITIS / MIOCARDITIS
- PATRÓN REPOLARIZACIÓN PRECOZ
- BLOQUEO DE RAMA IZQUIERDA
- HIPERTROFIA VENTRICULAR IZQUIERDA
- ANEURISMA VENTRICULAR
- SD. BRUGADA
- ESTIMULACIÓN VENTRICULAR POR MARCAPASOS
- HIPERTENSIÓN INTRACRANEAL
- MIOCARDIOPATÍA POR ESTRÉS (TAKOTSUBO)
- ALTERACIONES IÓNICAS (HIPERK+ ...)
- OTROS: WELLENS, WINTER, SGARBOSSA, SIGNO PICKELHAUBE

## Eco con función normal y cáncer en las coronarias



## Eco con función normal y cáncer en las coronarias



I

VR

V<sub>1</sub>

V<sub>4</sub>

II

VL

V<sub>2</sub>

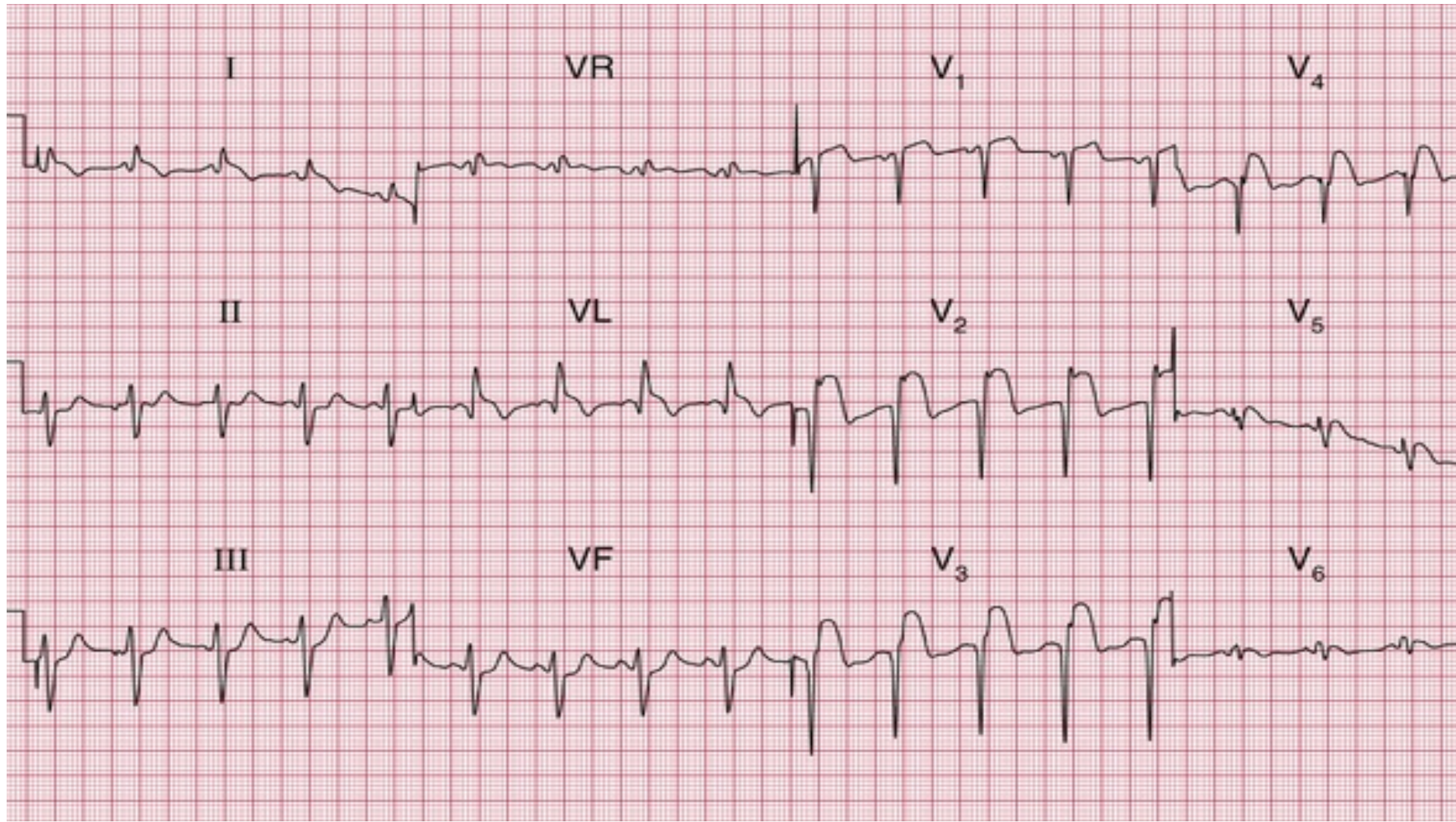
V<sub>5</sub>

III

VF

V<sub>3</sub>

V<sub>6</sub>



I

VR

V<sub>1</sub>

V<sub>4</sub>



II

VL

V<sub>2</sub>

V<sub>5</sub>



III

VF

V<sub>3</sub>

V<sub>6</sub>



I

VR

V<sub>1</sub>

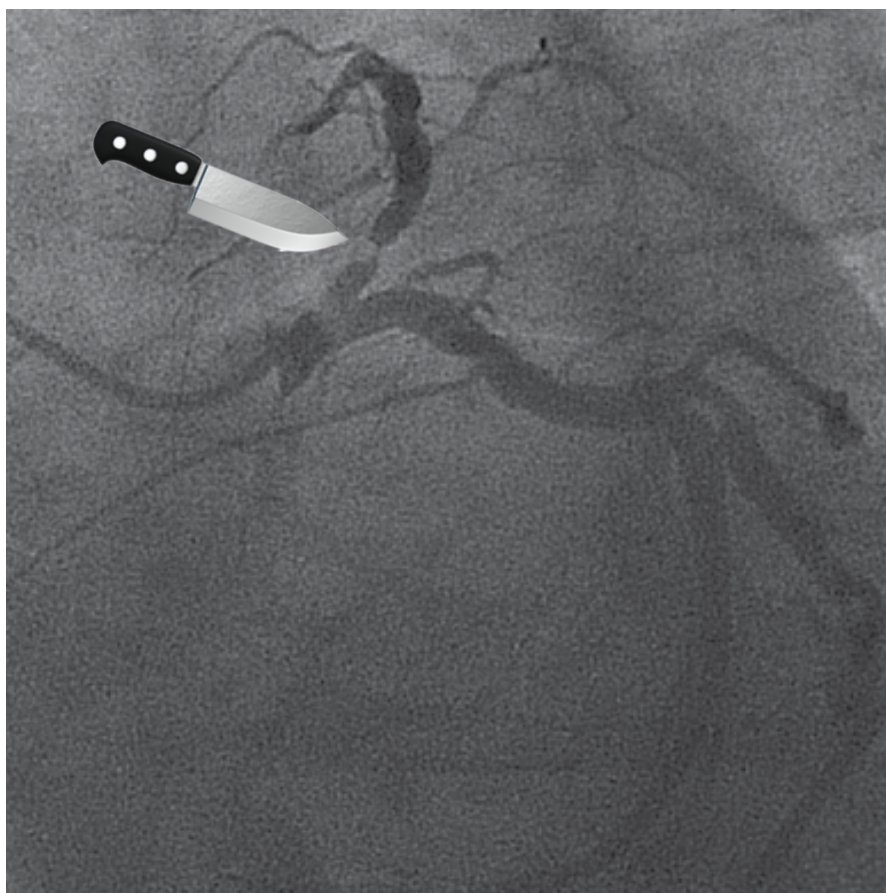
V<sub>4</sub>

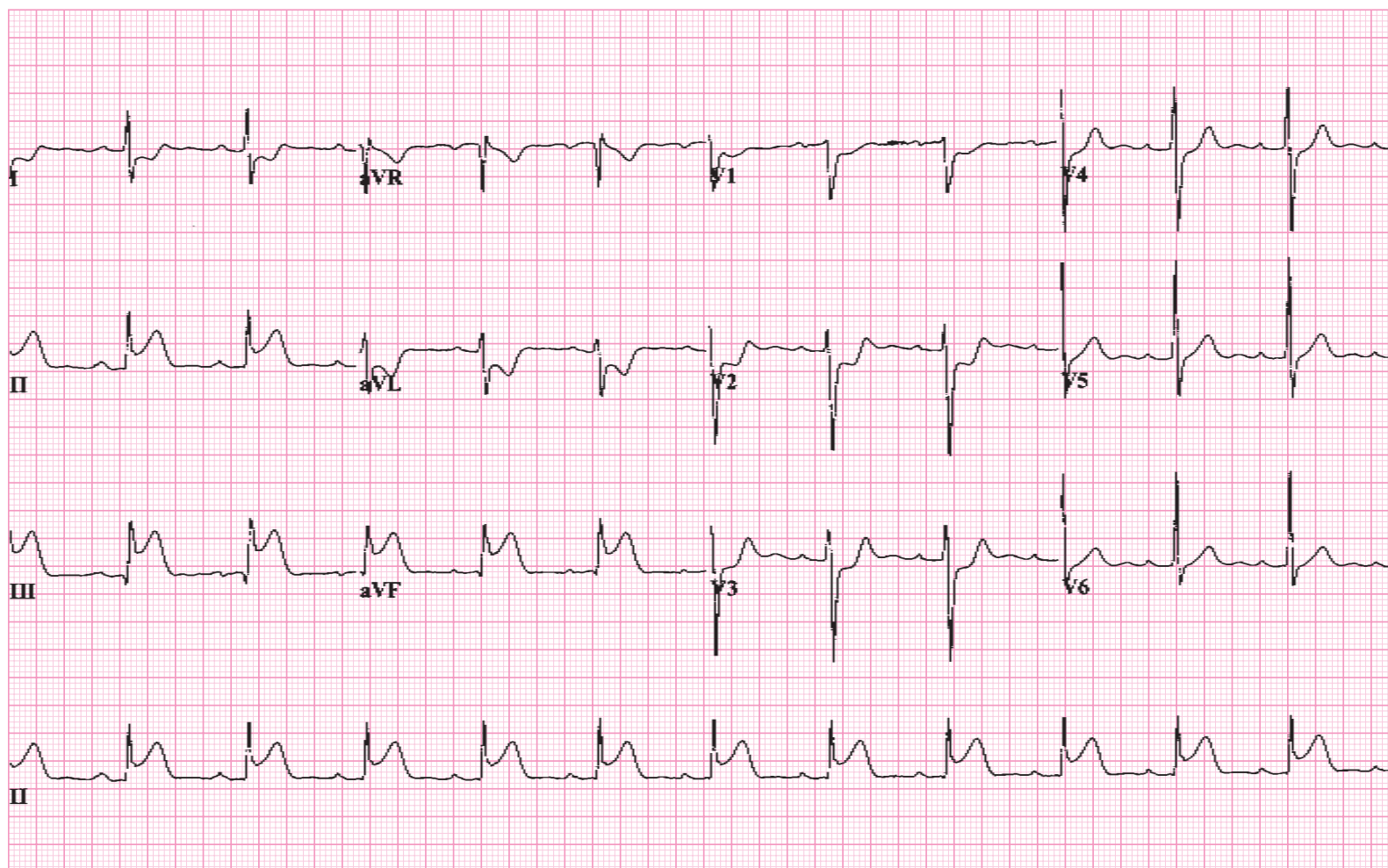
II

V<sub>5</sub>

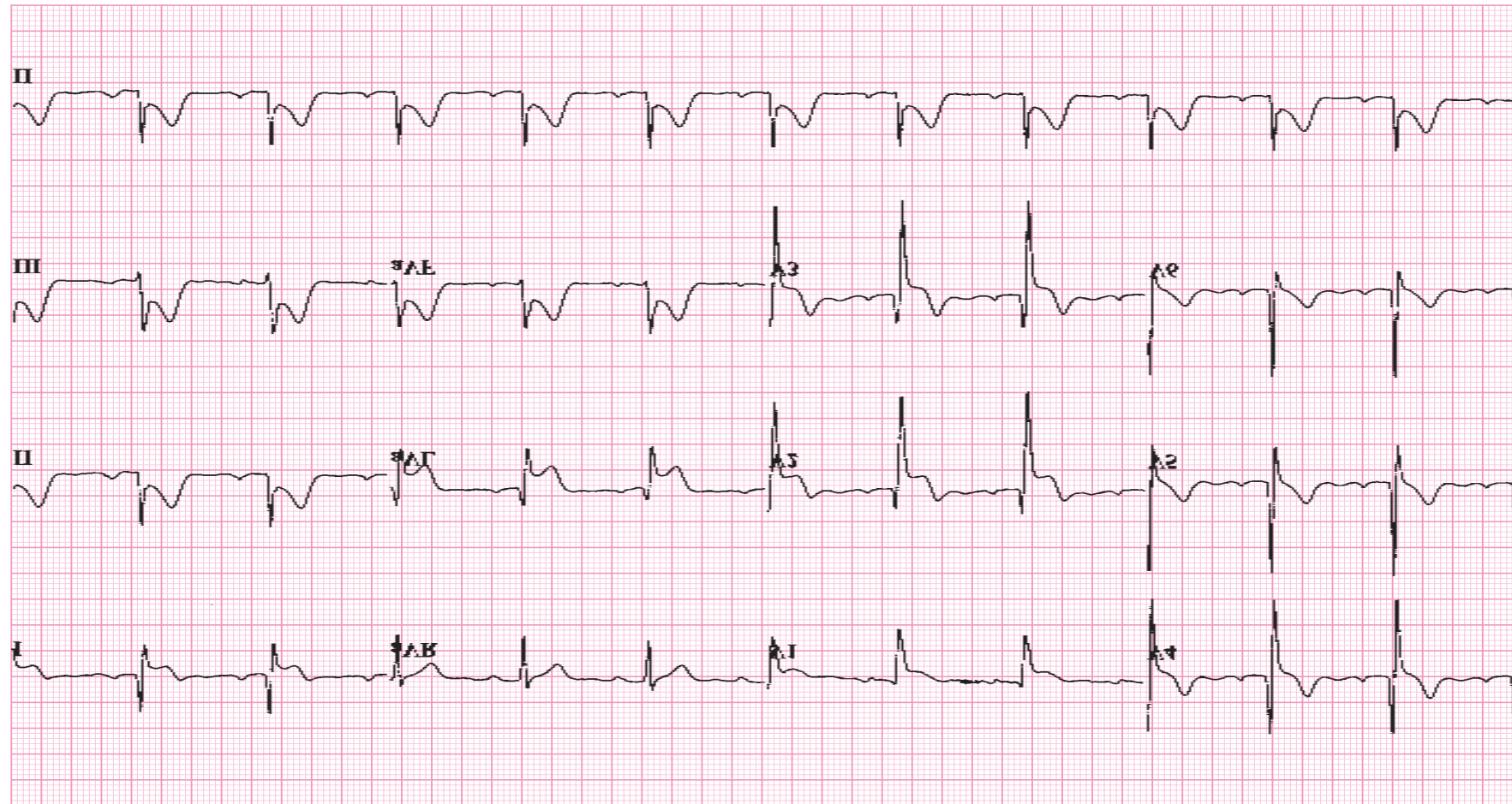
III

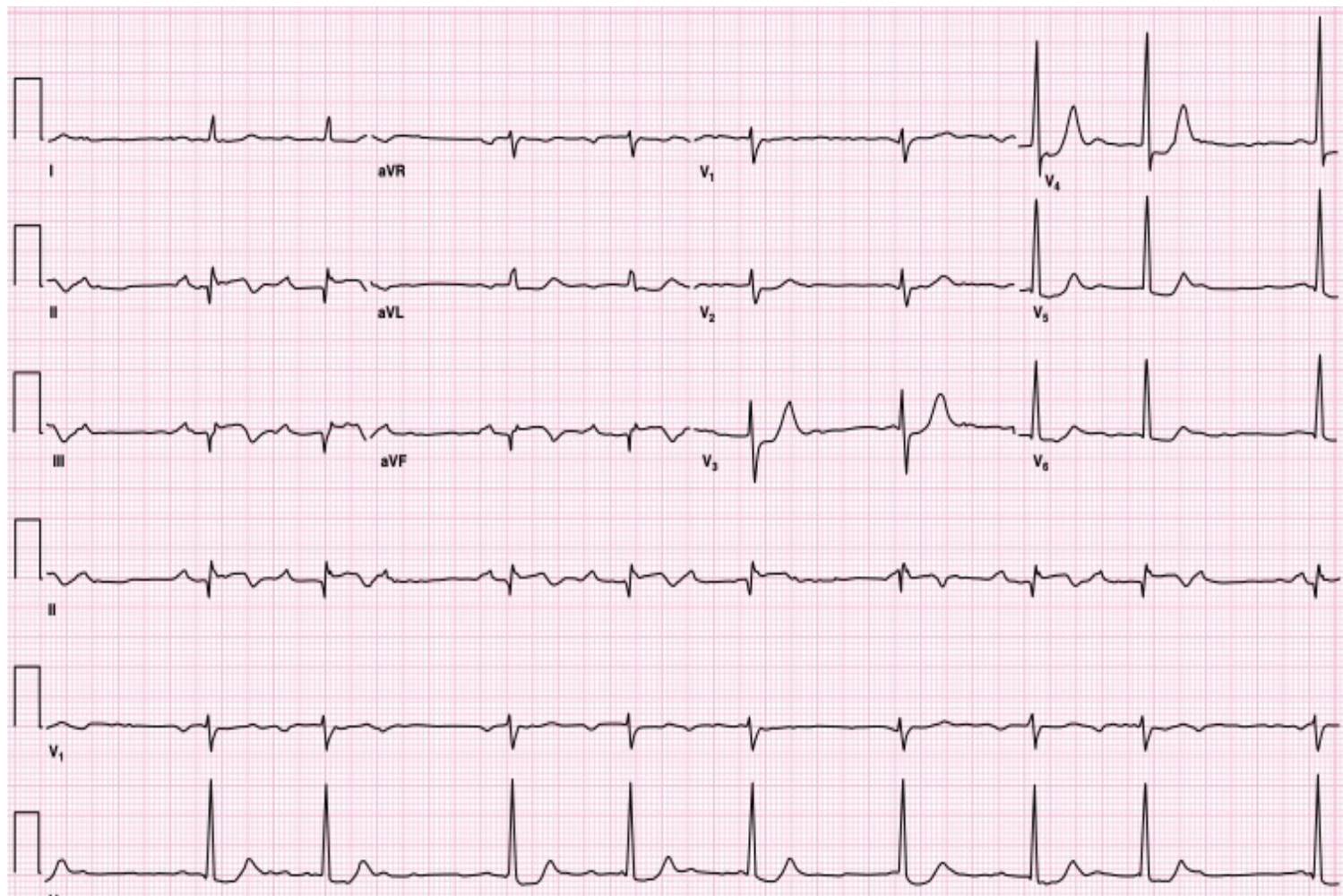
V<sub>6</sub>





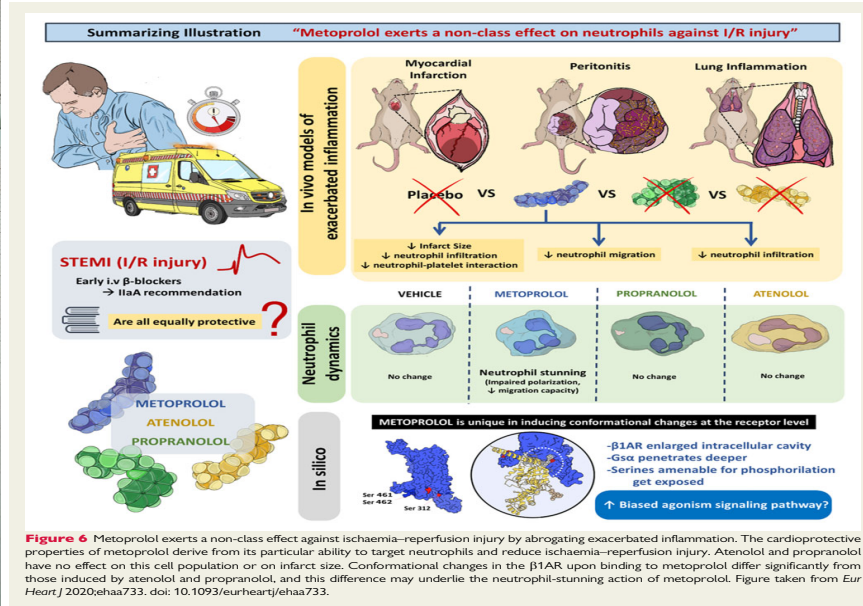
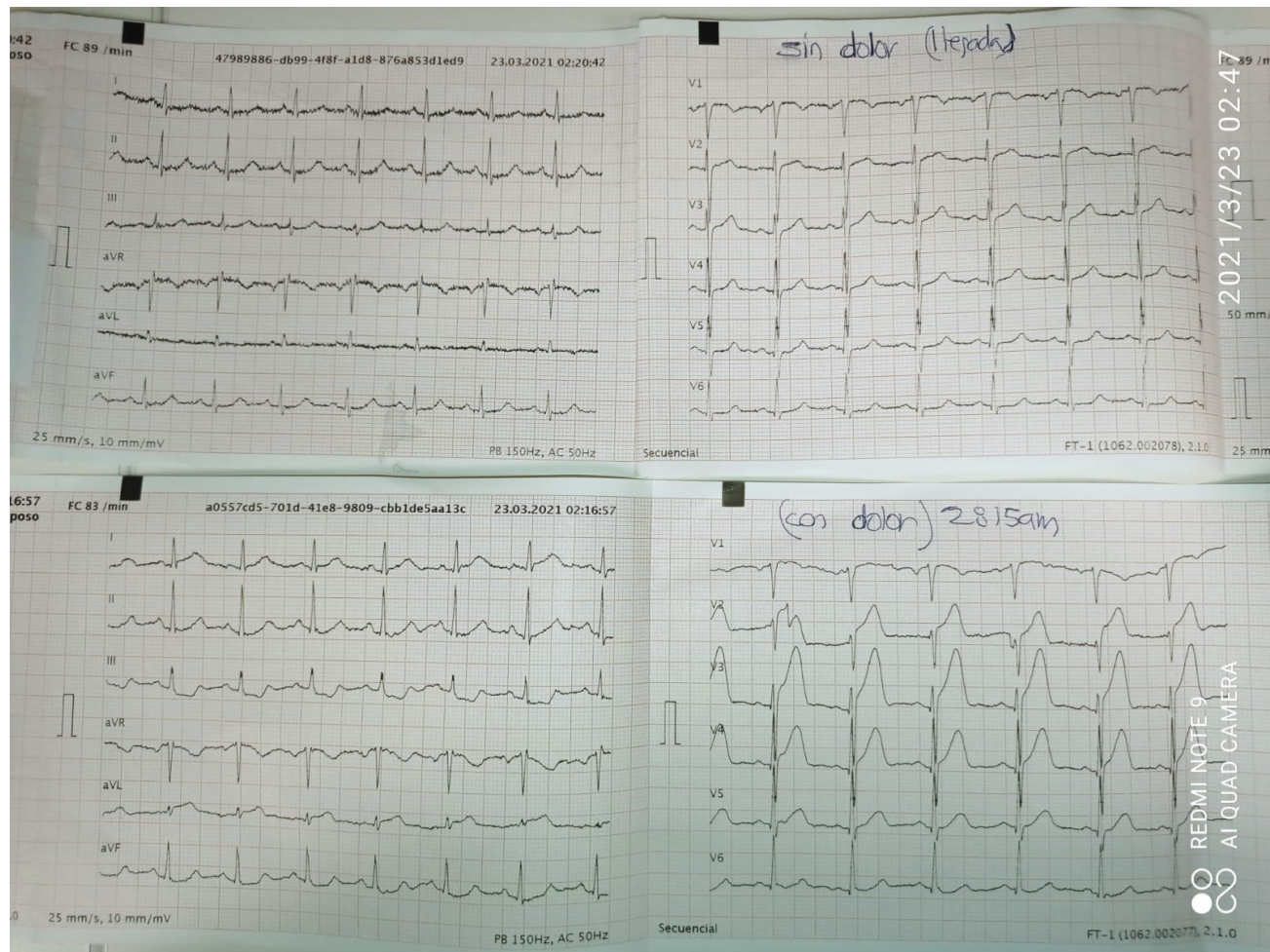
# Imagen especular



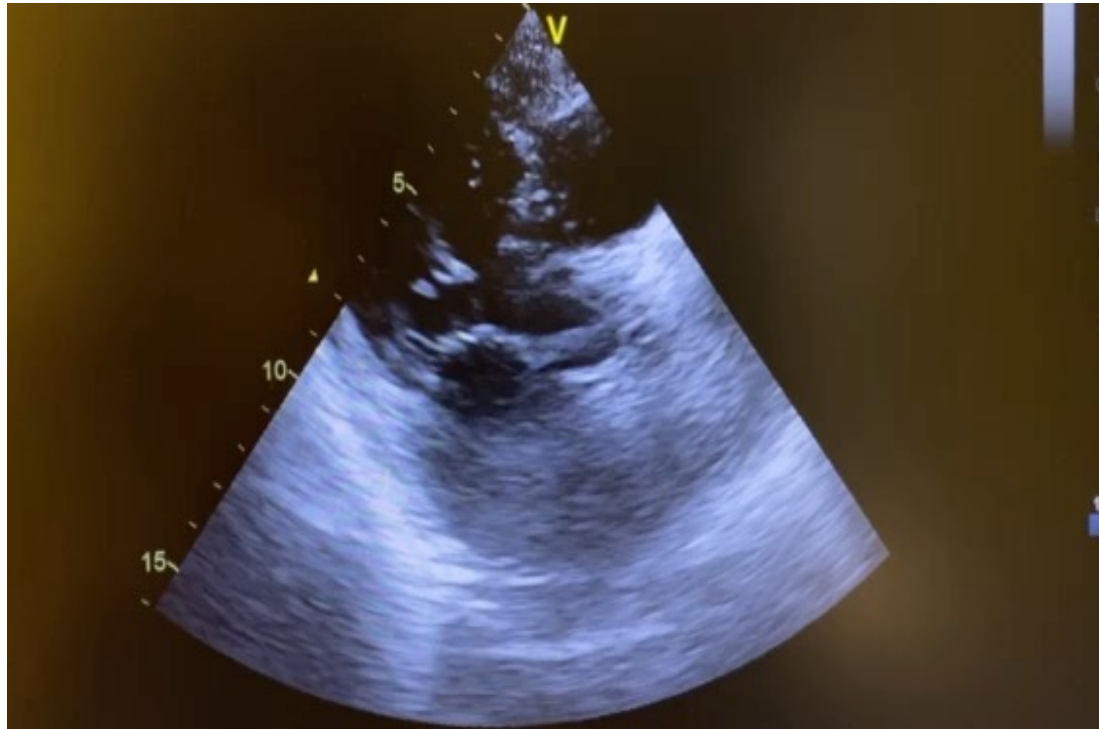


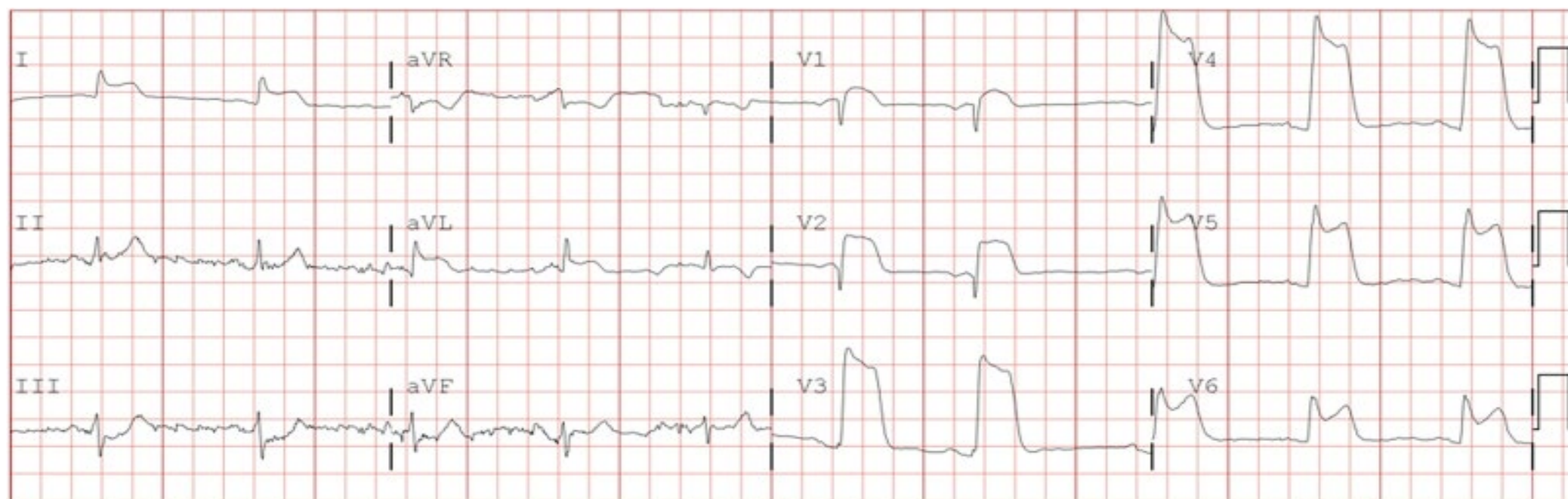
# Metoprolol

## Carga Ticagrelor

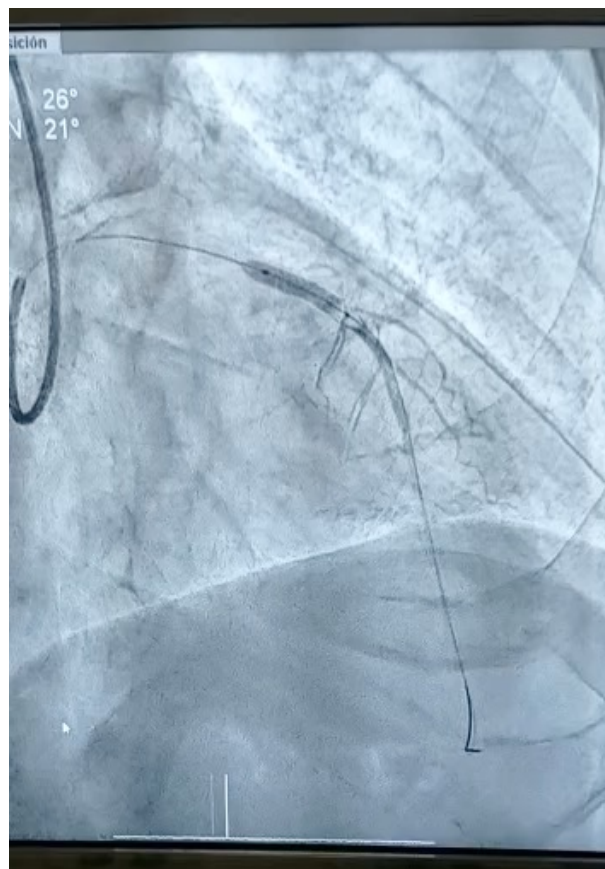


Varón 57 años, fumador, DM y HTA.  
Dolor torácico. 23 de Marzo de 2021









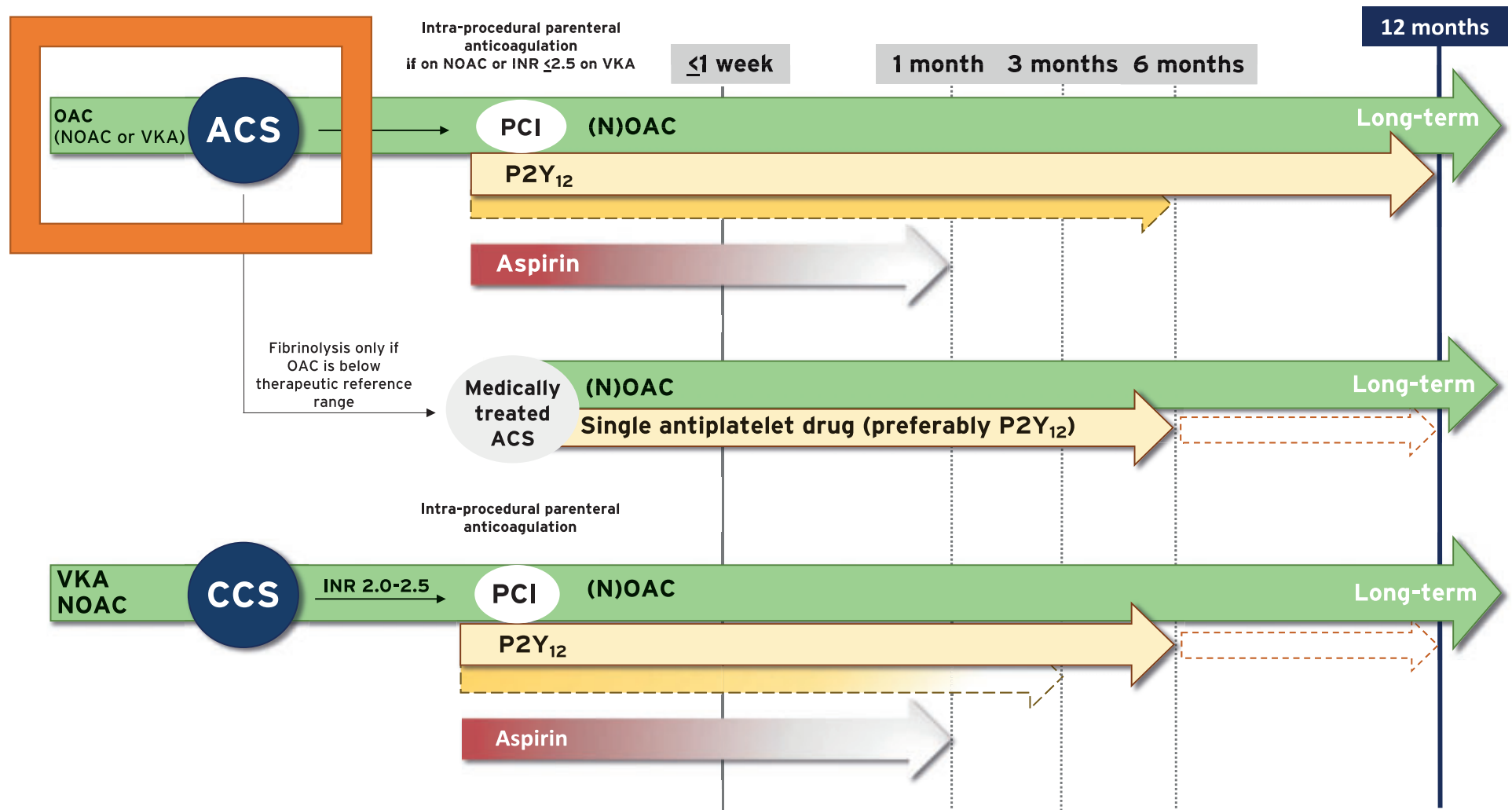
# Revascularización percutánea y FA



ESC

European Society  
of Cardiology

European Heart Journal (2020) 00, 1–126  
doi:10.1093/eurheartj/ehaa612



# Revascularización percutánea y FA



**ESC**

European Society  
of Cardiology

European Heart Journal (2020) **00**, 1–126  
doi:10.1093/eurheartj/ehaa612

## **THROMBOTIC RISK FACTORS**

- Diabetes mellitus requiring therapy
- Prior ACS/recurrent myocardial infarction
- Multivessel CAD
- Concomitant PAD
- Premature CAD (occurring at age of <45 y) or accelerated CAD (new lesion within 2 years)
- CKD (eGFR <60 mL/min)
- Clinical presentation (ACS)
- Multivessel stenting
- Complex revascularisation (left main stenting, bifurcation lesion stenting, chronic total occlusion intervention, last patent vessel stenting)
- Prior stent thrombosis on antiplatelet treatment
- Procedural factors (stent expansion, residual dissection, stent length, etc.)

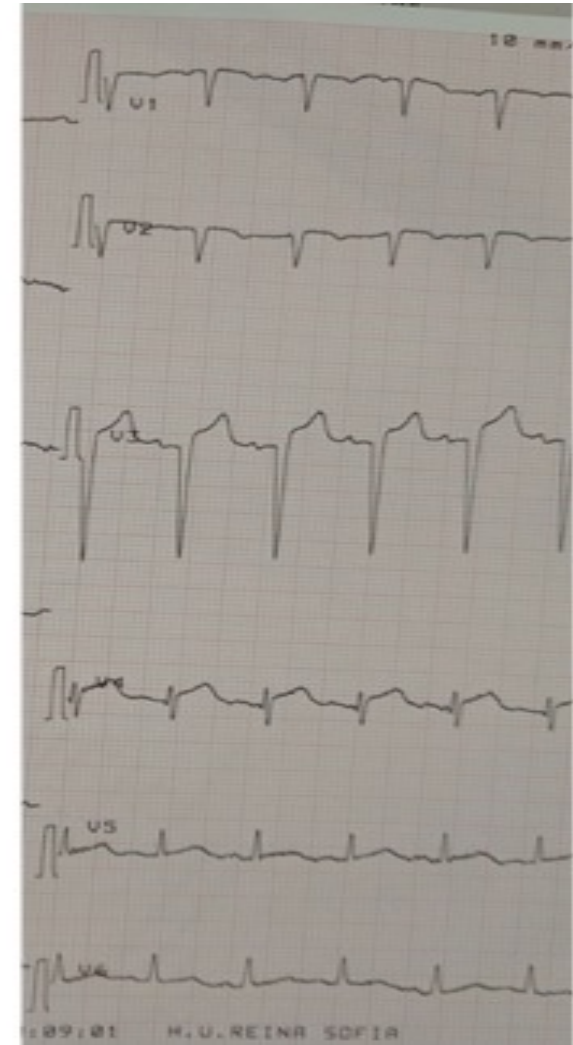
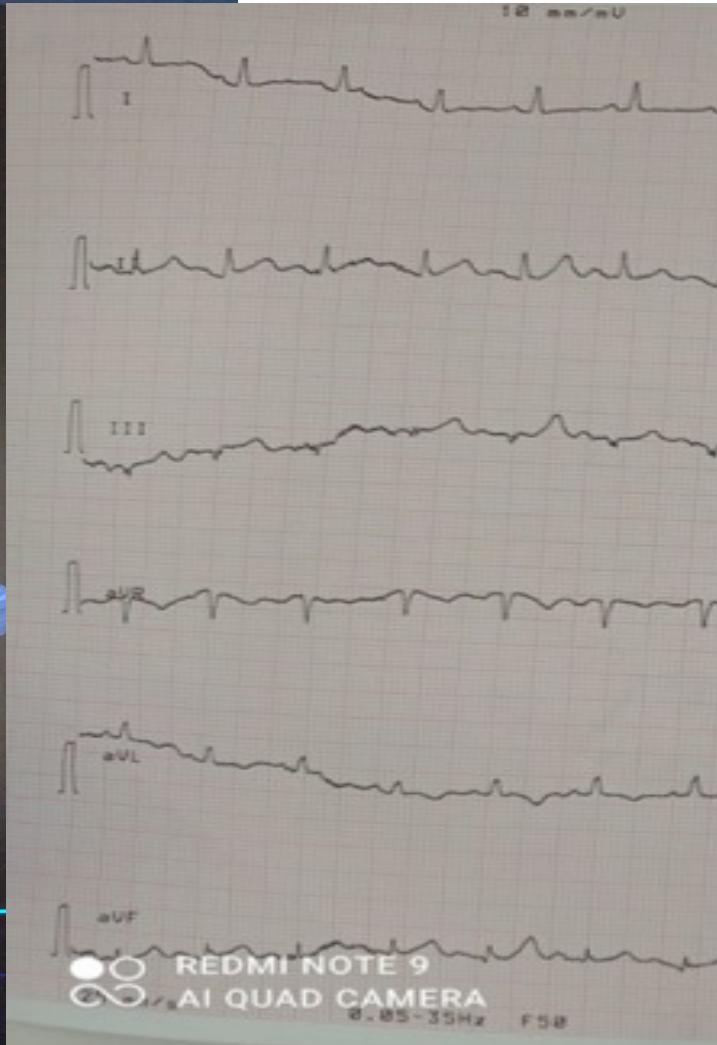
## **BLEEDING RISK FACTORS**

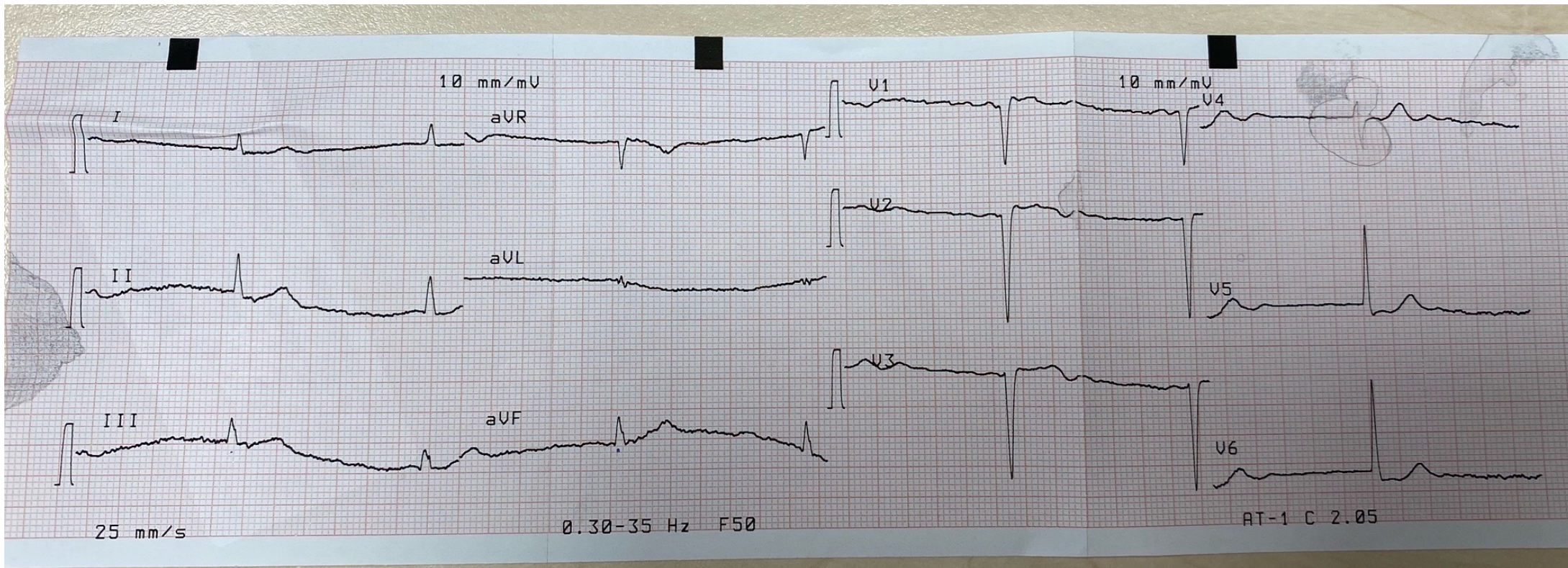
- Hypertension
- Abnormal renal or liver function
- Stroke or ICH history
- Bleeding history or bleeding diathesis (e.g., anaemia with haemoglobin <110 g/L)
- Labile INR (if on VKA)
- Elderly (>65 years)
- Drugs (concomitant OAC and antiplatelet therapy, NSAIDs), excessive alcohol consumption

## **STRATEGIES TO REDUCE BLEEDING ASSOCIATED WITH PCI**

- Radial artery access
- PPIs in patients taking DAPT who are at increased risk of bleeding (e.g., the elderly, dyspepsia, gastro-oesophageal reflux disease, Helicobacter pylori infection, chronic alcohol use)
- Non-administration of unfractionated heparin in patients on VKA with INR >2.5
- Pre-treatment with aspirin only, add a P2Y<sub>12</sub> inhibitor when coronary anatomy is known or if STEMI
- GP IIb/IIIa inhibitors only for bailout or periprocedural complications
- Shorter duration of combined antithrombotic therapy

Revisión 7 de Abril 2022





# Revisión 12/09/2022. Fibrilación auricular. Propuesto Ablación vvpp.

