

## Patrones de alto riesgo

- **No están relacionados con elevación del segmento ST.**
- **No requieren trombólisis pero si requieren ser llevados a una estrategia de reperfusión coronaria invasiva temprana.**

# Hallazgos electrocardiográficos de alto riesgo

**TABLE 1** Electrocardiogram Findings Suggestive of Ischemia

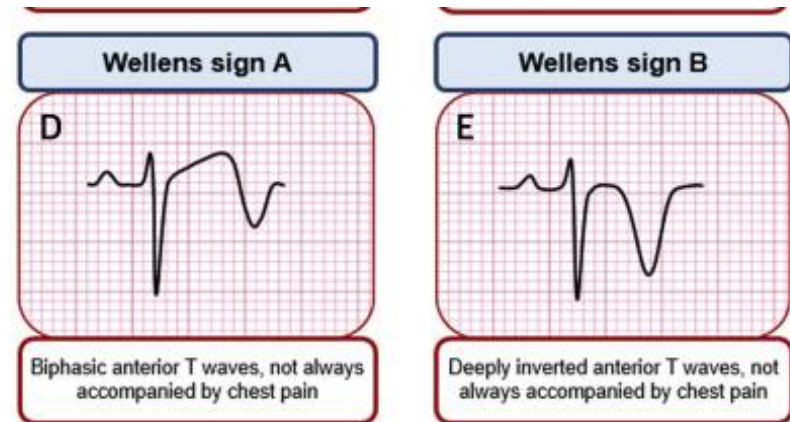
FINDING	CRITERIA
<b>STEMI equivalents</b>	
Posterior STEMI	<p><b>Criteria:</b></p> <ul style="list-style-type: none"> <li>■ Horizontal ST-segment depression in V<sub>1</sub>-V<sub>3</sub></li> <li>■ Dominant R-wave (R/S ratio &gt;1) in V<sub>2</sub></li> <li>■ Upright T waves in anterior leads</li> <li>■ Prominent and broad R-wave (&gt;30 ms)</li> </ul> <p><b>Confirmed by:</b></p> <ul style="list-style-type: none"> <li>■ ST-segment elevation of <math>\leq 0.5</math> mm in at least 1 of leads V<sub>7</sub>-V<sub>9</sub>*</li> </ul>
Left bundle branch block or ventricular paced rhythm with Sgarbossa Criteria	<p>A total score <math>\geq 3</math> points is required:</p> <ul style="list-style-type: none"> <li>■ Concordant ST-segment elevation <math>\geq 1</math> mm in leads with a positive QRS complex (5 points)</li> <li>■ Concordant ST-segment depression <math>\geq 1</math> mm in leads V<sub>1</sub>-V<sub>3</sub> (3 points)</li> <li>■ Discordant ST-segment elevation <math>\geq 5</math> mm in leads with a negative QRS complex (2 points)</li> </ul> <p>If there is discordant ST-segment elevation <math>\geq 5</math> mm, consider ST/S ratio <math>&lt; -0.25</math></p>
Left bundle branch block or ventricular paced rhythm with Smith-modified Sgarbossa Criteria	<p>Positive if any of the following are present:</p> <ul style="list-style-type: none"> <li>■ Concordant ST-segment elevation of 1 mm in leads with a positive QRS complex</li> <li>■ Concordant ST-segment depression of 1 mm in V<sub>1</sub>-V<sub>3</sub></li> <li>■ ST-segment elevation at the J-point, relative to the QRS onset, is at least 1 mm and has an amplitude of at least 25% of the preceding S-wave</li> </ul>
De Winter Sign	<ul style="list-style-type: none"> <li>■ Tall, prominent, symmetrical T waves arising from upsloping ST-segment depression <math>&gt;1</math> mm at the J-point in the precordial leads</li> <li>■ 0.5-1 mm ST-segment elevation may be seen in lead aVR</li> </ul>
Hyperacute T waves	<p>Broad, asymmetric, peaked T waves may be seen early in STEMI</p> <p>Serial ECGs over very short intervals are useful to assess for progression to STEMI</p>
<b>ECG findings consistent with acute/subacute myocardial ischemia</b>	
aVR ST-segment elevation	<p>Most often caused by diffuse subendocardial ischemia and usually occurs in the setting of significant left main coronary artery or multivessel coronary artery disease</p> <ul style="list-style-type: none"> <li>■ ST-segment elevation in aVR <math>\leq 1</math> mm</li> <li>■ Multilead ST-segment depression in leads I, II, Va1, and/or V<sub>4</sub>-V<sub>6</sub></li> <li>■ Absence of contiguous ST-segment elevation in other leads</li> </ul>
ST-segment depression	<p>Horizontal or downsloping ST-segment depression <math>\geq 0.5</math> mm at the J-point in 2 or more contiguous leads is suggestive of myocardial ischemia</p>
Wellen's syndrome	<p>Clinical syndrome characterized by:</p> <ul style="list-style-type: none"> <li>■ Biphasic or deeply inverted and symmetric T waves in leads V<sub>2</sub> and V<sub>3</sub> (may extend to V<sub>6</sub>)</li> <li>■ Recent angina</li> <li>■ Absence of Q waves</li> </ul>
Inverted T waves	<p>May be seen in ischemia (subacute) or infarction (may be fixed and associated with Q waves) in continuous leads</p>

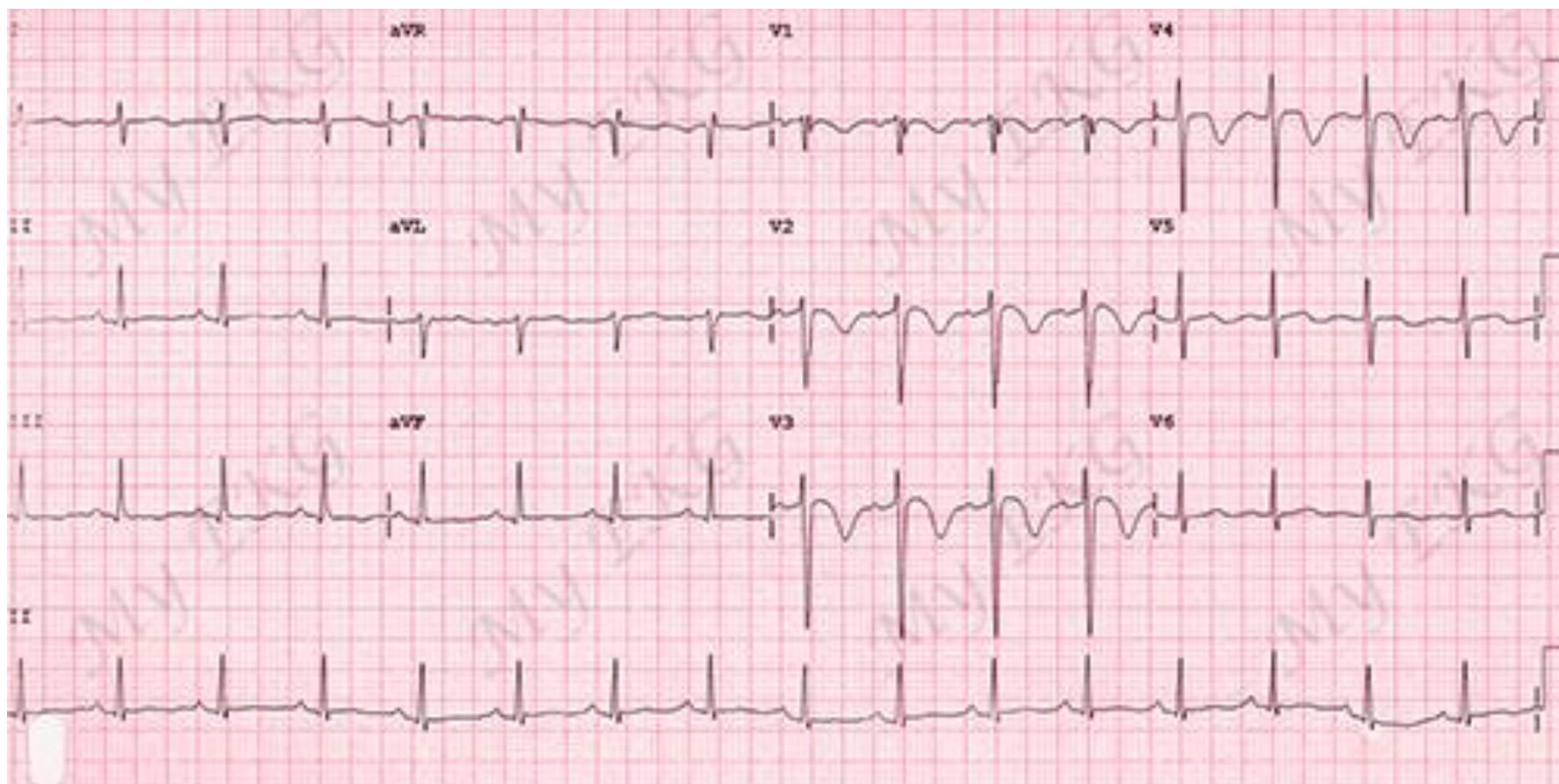
# Patrones de alto riesgo: Patrón de Wellens

**Wellens tipo A:** Onda T isobifásica en las derivaciones V1-V4.

**Wellens tipo B:** Inversión de Onda T de características simétricas.

Se asocia a estenosis de la arteria descendente anterior proximal (ADA) e infarto masivo inminente de la pared anterior del miocardio.



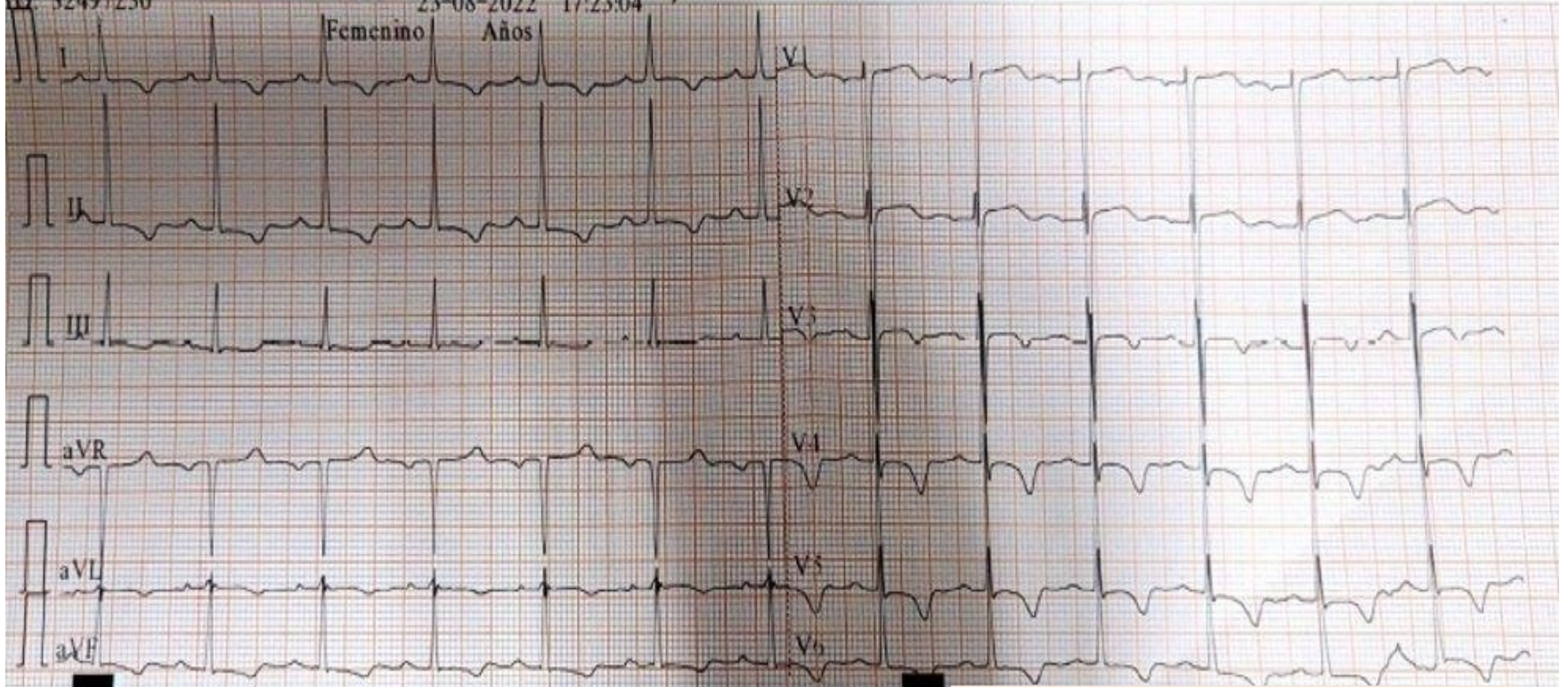




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Femenino  
Años

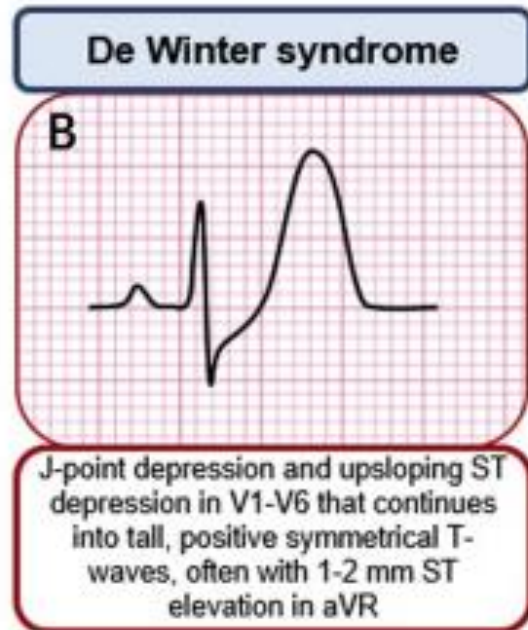


0.32-25Hz AC50 25mm/s 10mm/mV 2por5s ♥79 SE-601-103  
Biotropo FOX00A OP 222 TE / FX7202

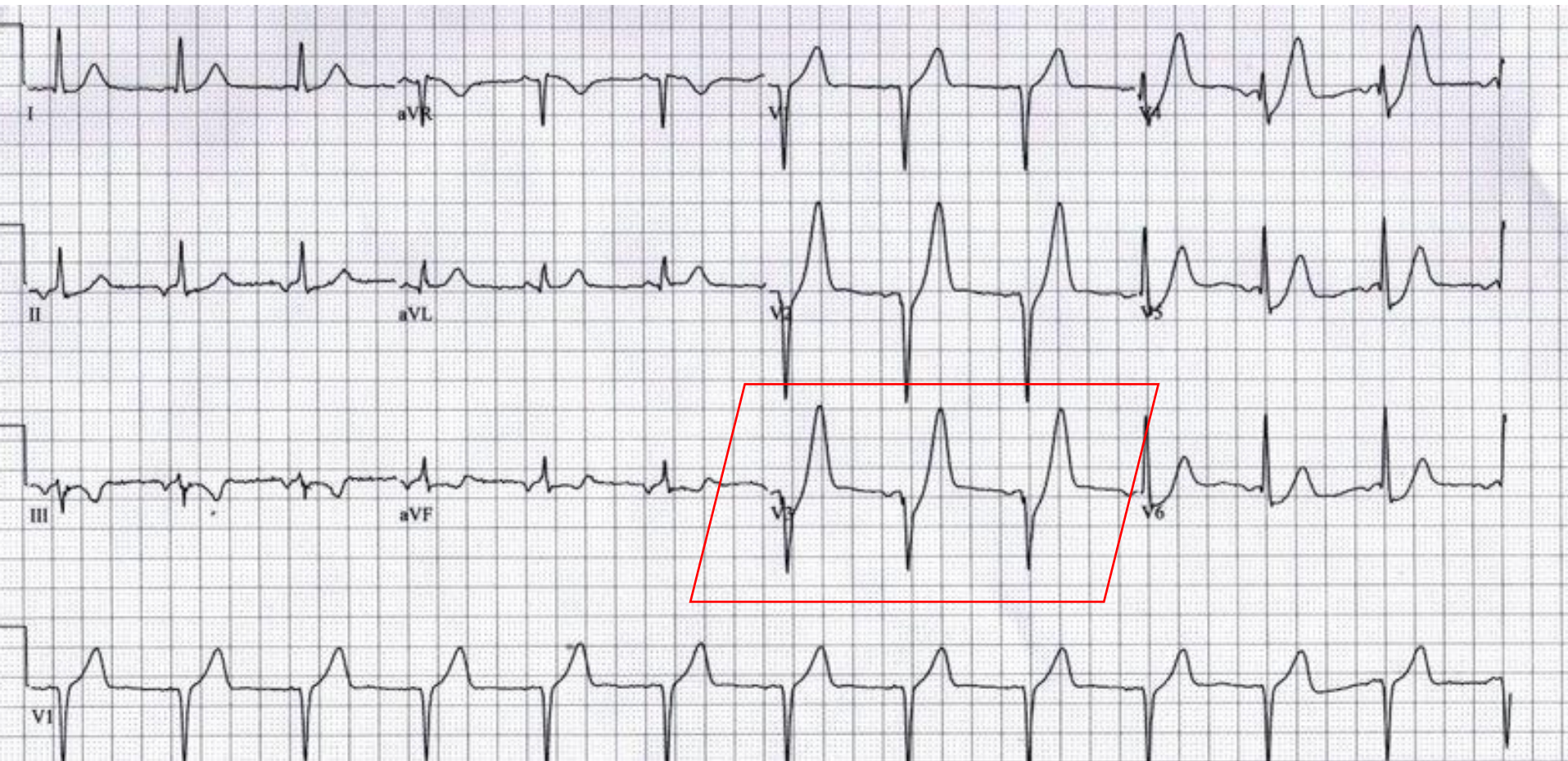
# Patrón de Winter

Se presenta con Infradesnivel del segmento ST en las derivaciones precordiales (v1-v6), con ondas T hiperagudas. Puede presentarse también con elevación en avR.

Este hallazgo se correlaciona clínicamente con oclusión de la coronaria descendente anterior







# Tronco coronario izquierdo

Elevación del segmento ST  
en avR.

Infra desnivel del segmento  
ST en al menos 6 derivadas.

## ARTICULO ORIGINAL

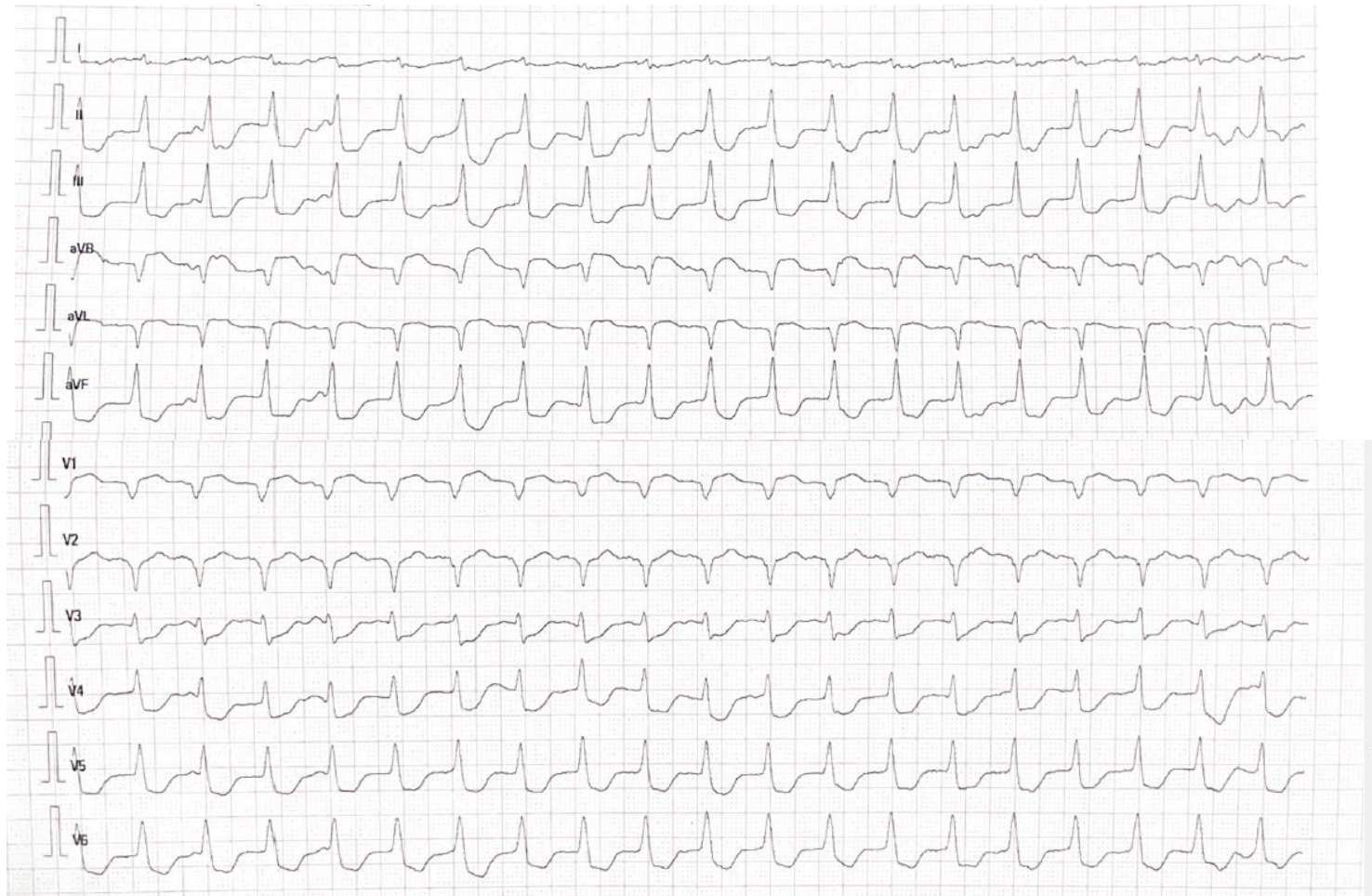
### Diagnóstico electrocardiográfico de la obstrucción del tronco coronario izquierdo mediante el análisis vectorial del segmento ST y el complejo QRS

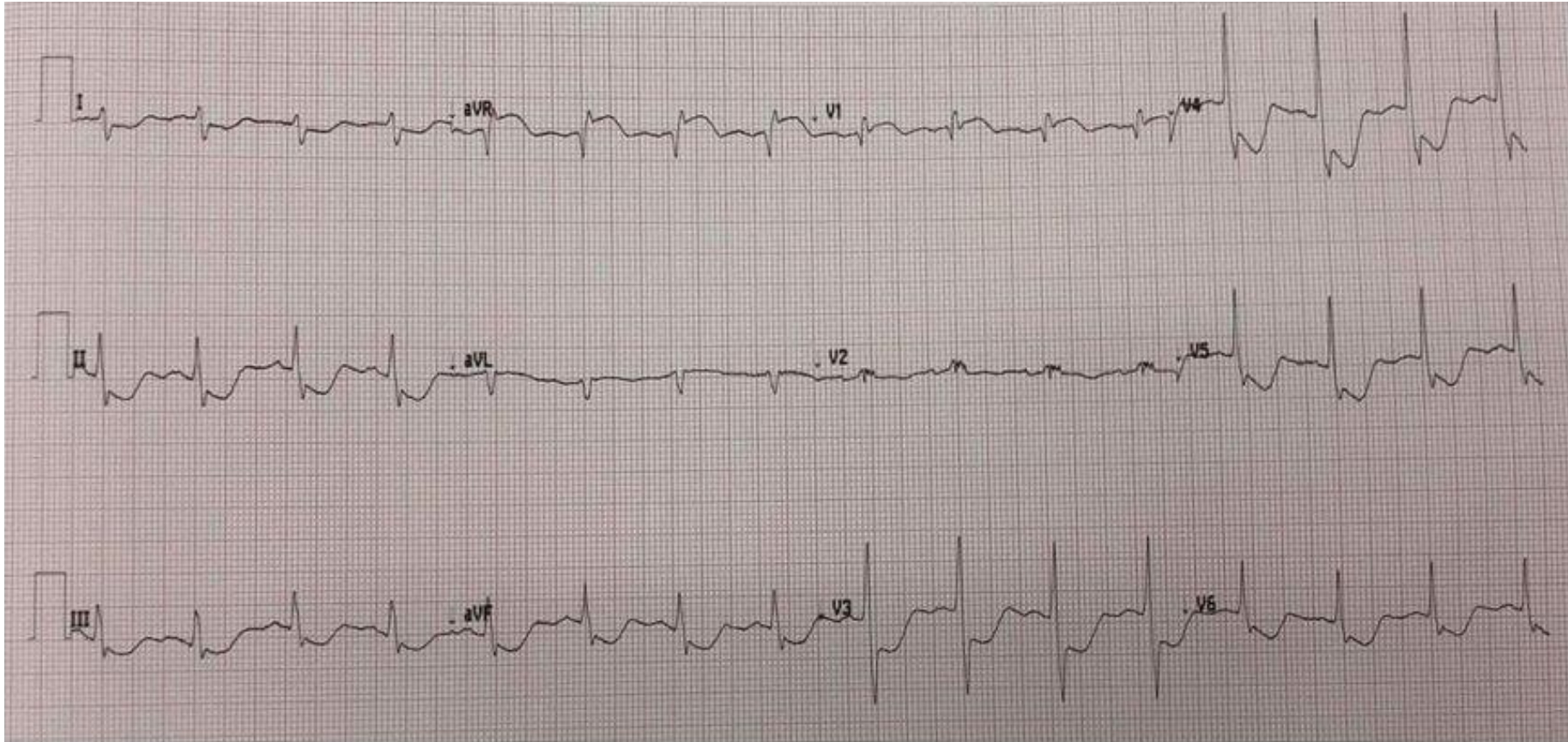
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# Bloqueo de Rama izquierda de novo o presumiblemente de novo

**Criterios de Barcelona**  
(previamente  
criterios de  
Sgarbossa).

Journal of the American Heart Association

## ORIGINAL RESEARCH

### New Electrocardiographic Algorithm for the Diagnosis of Acute Myocardial Infarction in Patients With Left Bundle Branch Block

Andrea Di Marco, MD\*; Marcos Rodriguez, MD\*; Juan Cinca, MD, PhD; Antoni Bayes-Genis, MD, PhD; Jose T. Ortiz-Perez, MD; Albert Ariza-Solé, MD, PhD; Jose Carlos Sanchez-Salado, MD; Alessandro Sionis, MD, PhD; Jany Rodriguez, MD; Beatriz Toledano, MD; Pau Codina, MD; Eduard Solé-González, MD; Monica Masotti, MD; Joan Antoni Gómez-Hospital, MD, PhD; Àngel Cequier, MD, PhD; Ignasi Anguera, MD, PhD

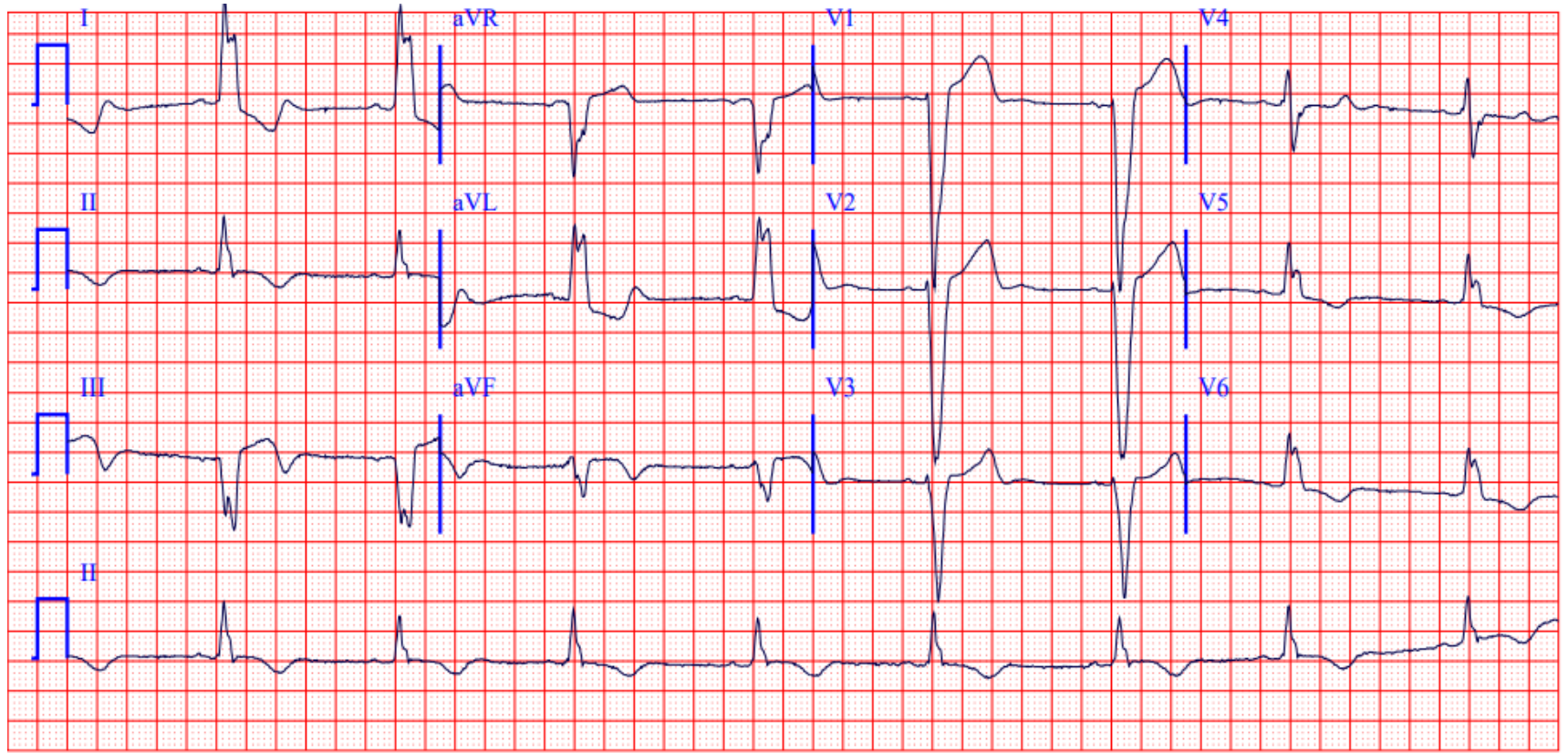
**Table 5. Definition of the BARCELONA Algorithm to Diagnose AMI in the Presence of LBBB**

The BARCELONA algorithm is positive if any of the following criteria are present:

- (1) ST deviation  $\geq 1$  mm (0.1 mV) concordant with QRS polarity in any ECG lead, thus including either:
  - ST depression  $\geq 1$  mm (0.1 mV) concordant with QRS polarity, in any ECG lead.
  - ST elevation  $\geq 1$  mm (0.1 mV) concordant with QRS polarity, in any ECG lead (Sgarbossa score 5).
- (2) ST deviation  $\geq 1$  mm (0.1 mV) discordant with QRS polarity, in any lead with max (R)S voltage  $\leq 6$  mm (0.6 mV).

AMI indicates acute myocardial infarction; and LBBB, left bundle branch block.







# Patrón de ASLANGER

Oclusión Inferior aguda:

- (1) STE en III pero no en ninguna otra derivación inferior,
- (2) depresión del ST en cualquiera de las derivaciones V4 a 6 (pero no en V2) con una onda T positiva (al menos terminalmente positiva),
- (3) ST en la derivación V1 más alto que ST en V2.

A new electrocardiographic pattern indicating inferior myocardial infarction



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**Conclusion:** We here define a new ECG pattern indicating inferior MI in patients with concomitant critical lesion (s) in coronary arteries other than the infarct-related artery. Patients with this pattern have multivessel disease and higher mortality.

