

# Der freie Fall in der freien Praxis in der Infarkt Diagnostik bei

Linksschenkelblock

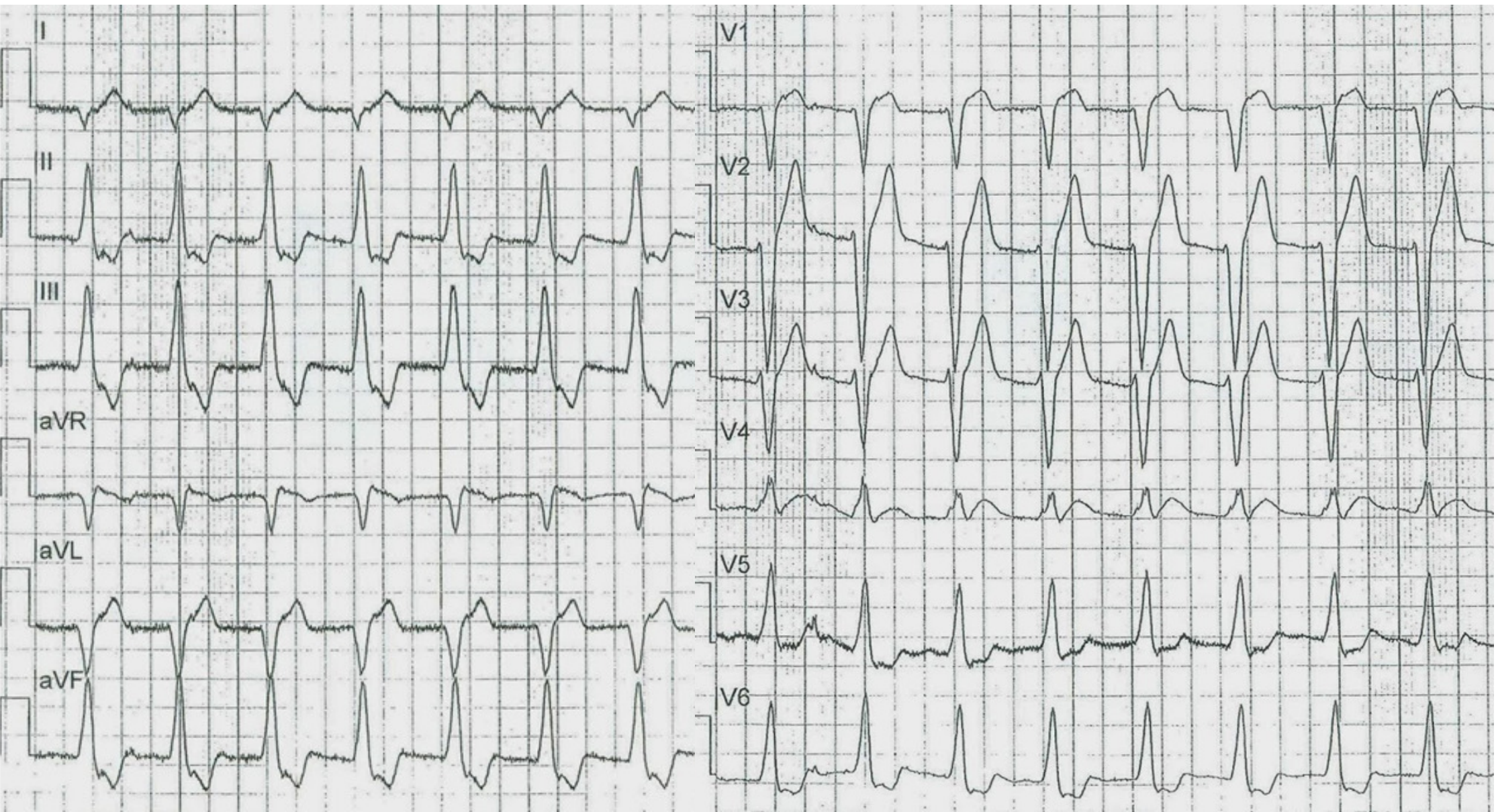
Rechtsschenkelblock

Schrittmacher-EKG

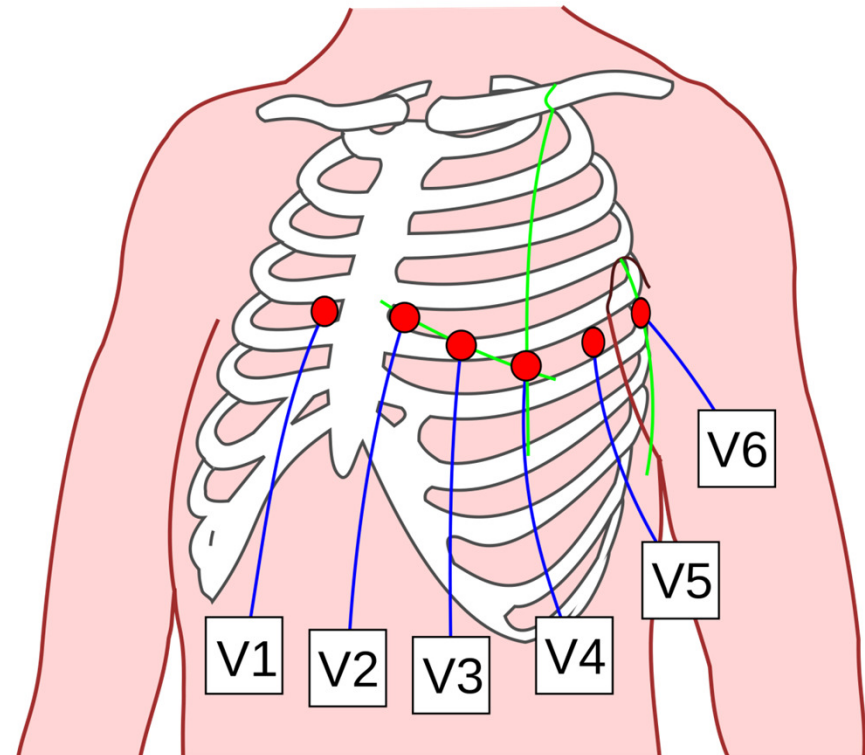
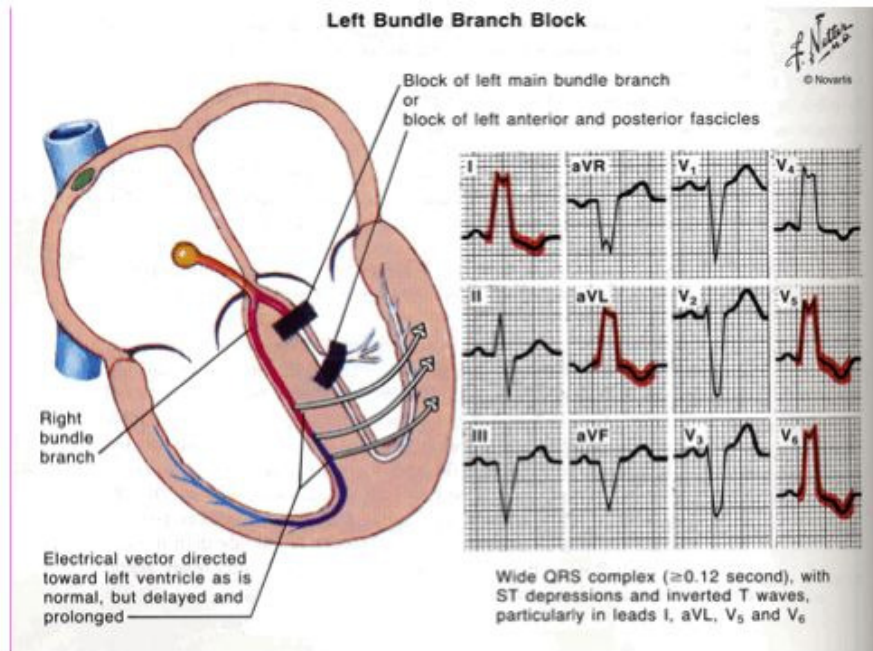
R.Mury, Emmenbrücke

# Ein Hebungsinfarkt kann sich zeigen bei

1. Nur bei LSB
2. Nur bei RSB
3. Nur bei gepactem Rhythmus
4. Nur bei LSB und RSB
5. Nur bei RSB und gepactem Rhythmus
6. Nie bei LSB und gepactem Rhythmus
7. Bei RSB, LSB und gepactem Rhythmus
8. Das hängt vom jeweiligen Kanton ab



# Left bundle branch block

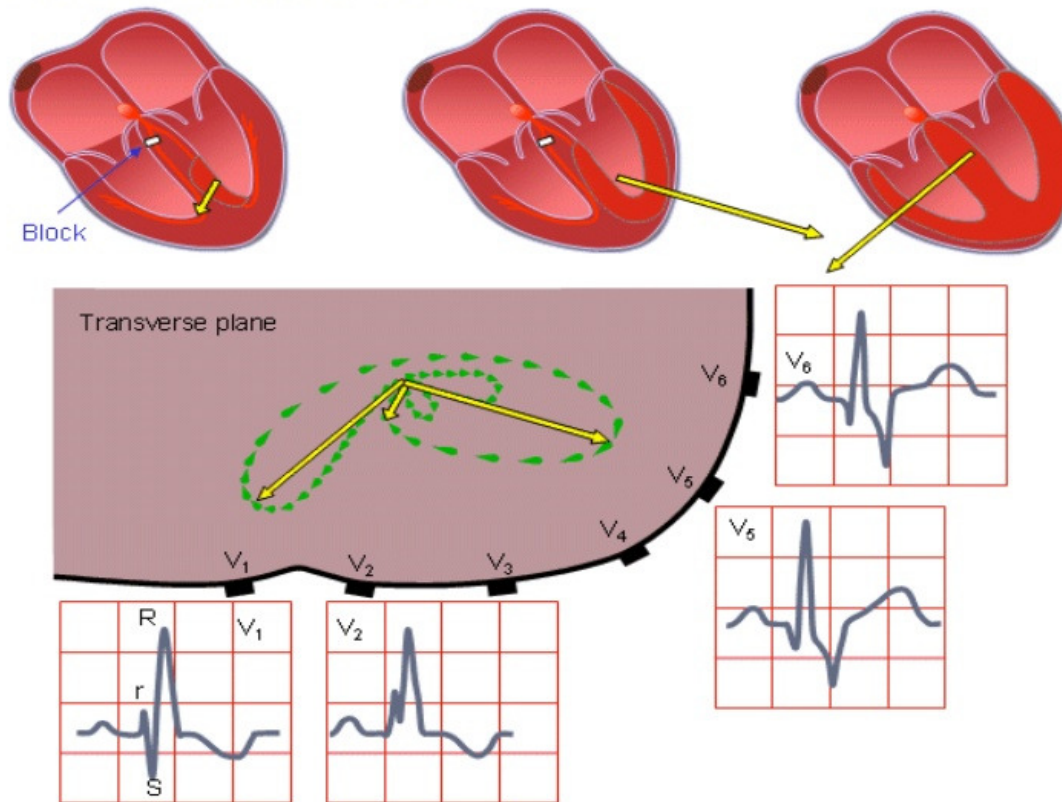




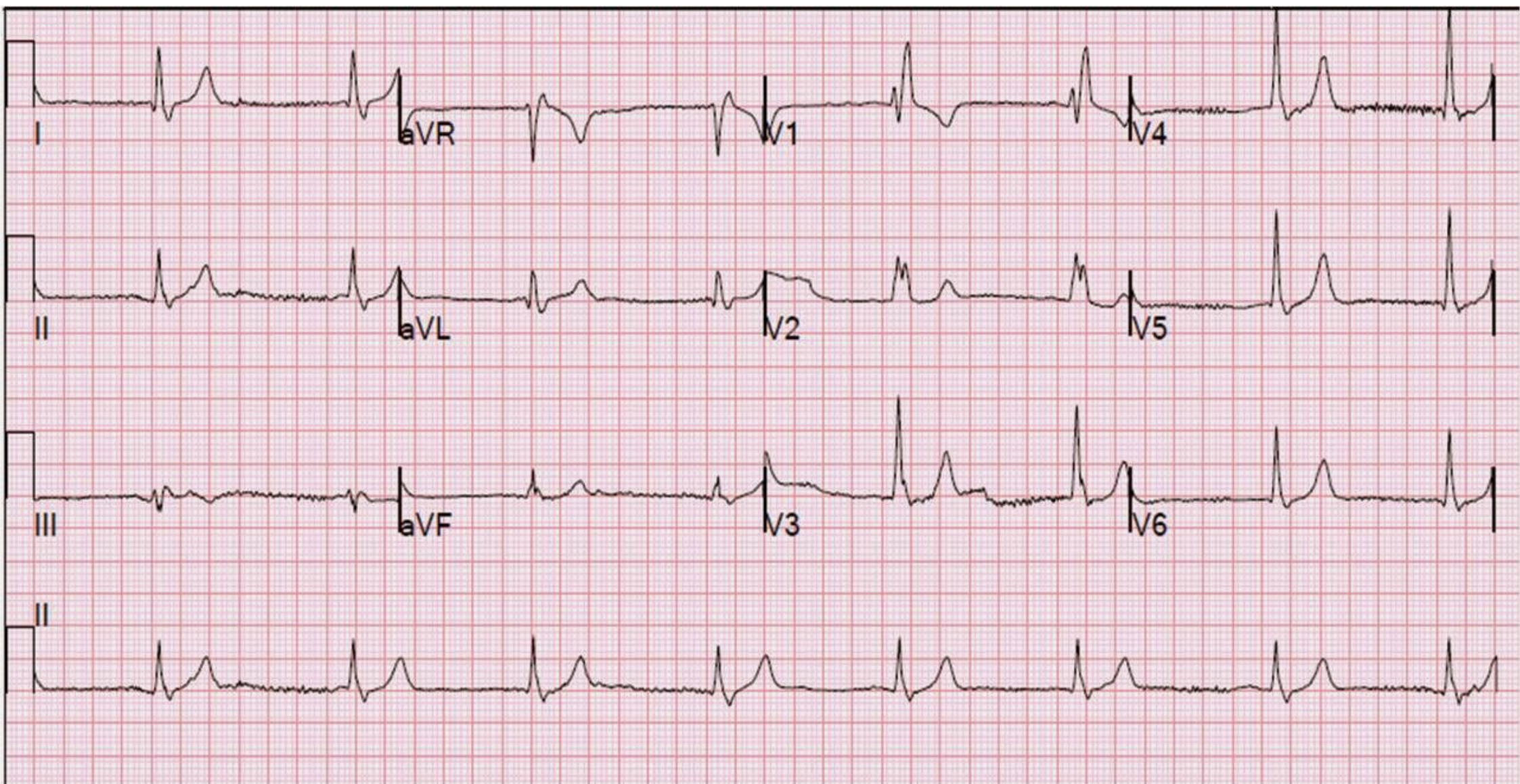


## RIGHT BUNDLE-BRANCH BLOCK

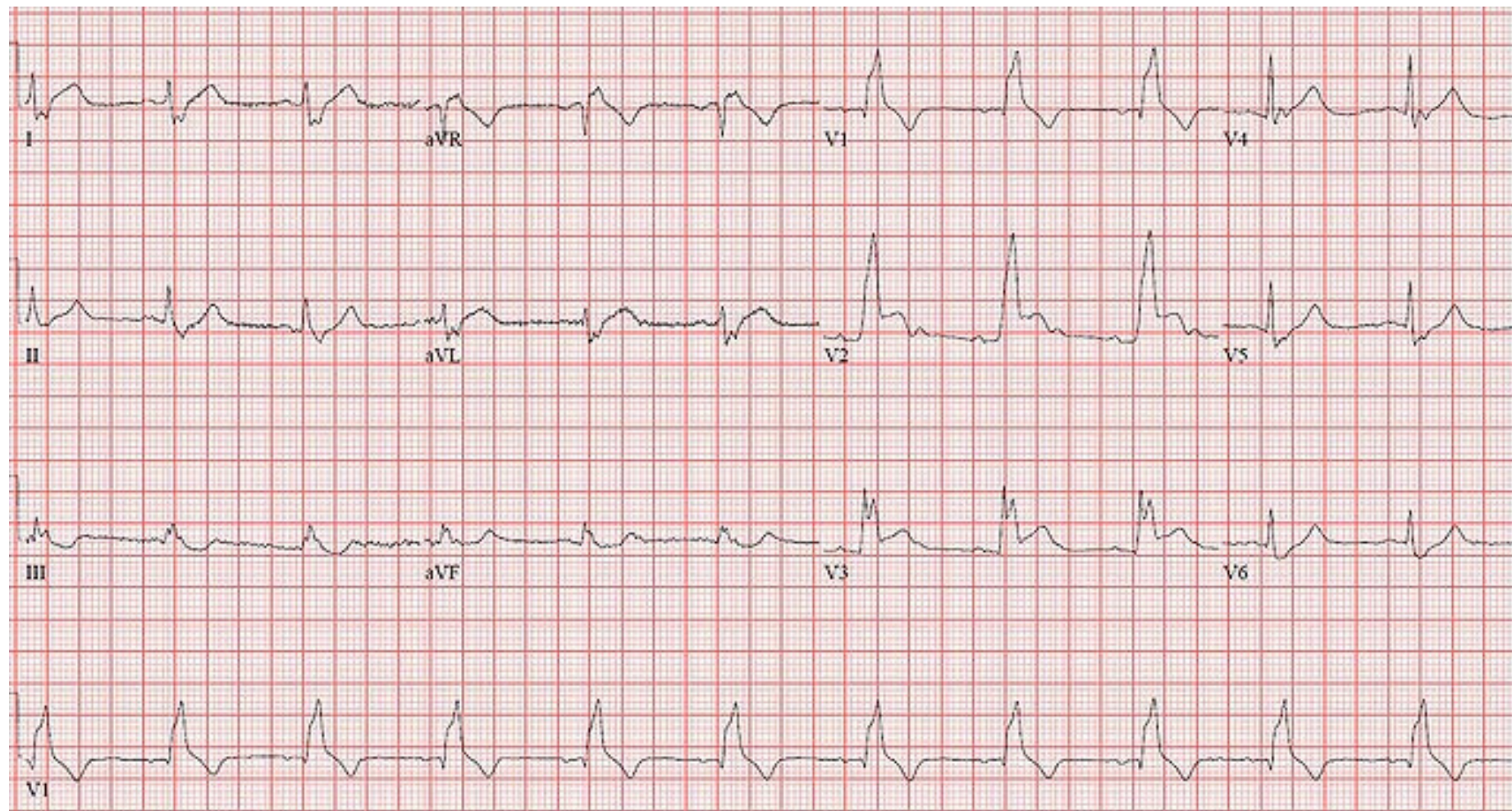
QRS duration greater than 0.12 s  
Wide S wave in leads I, V5, and V6



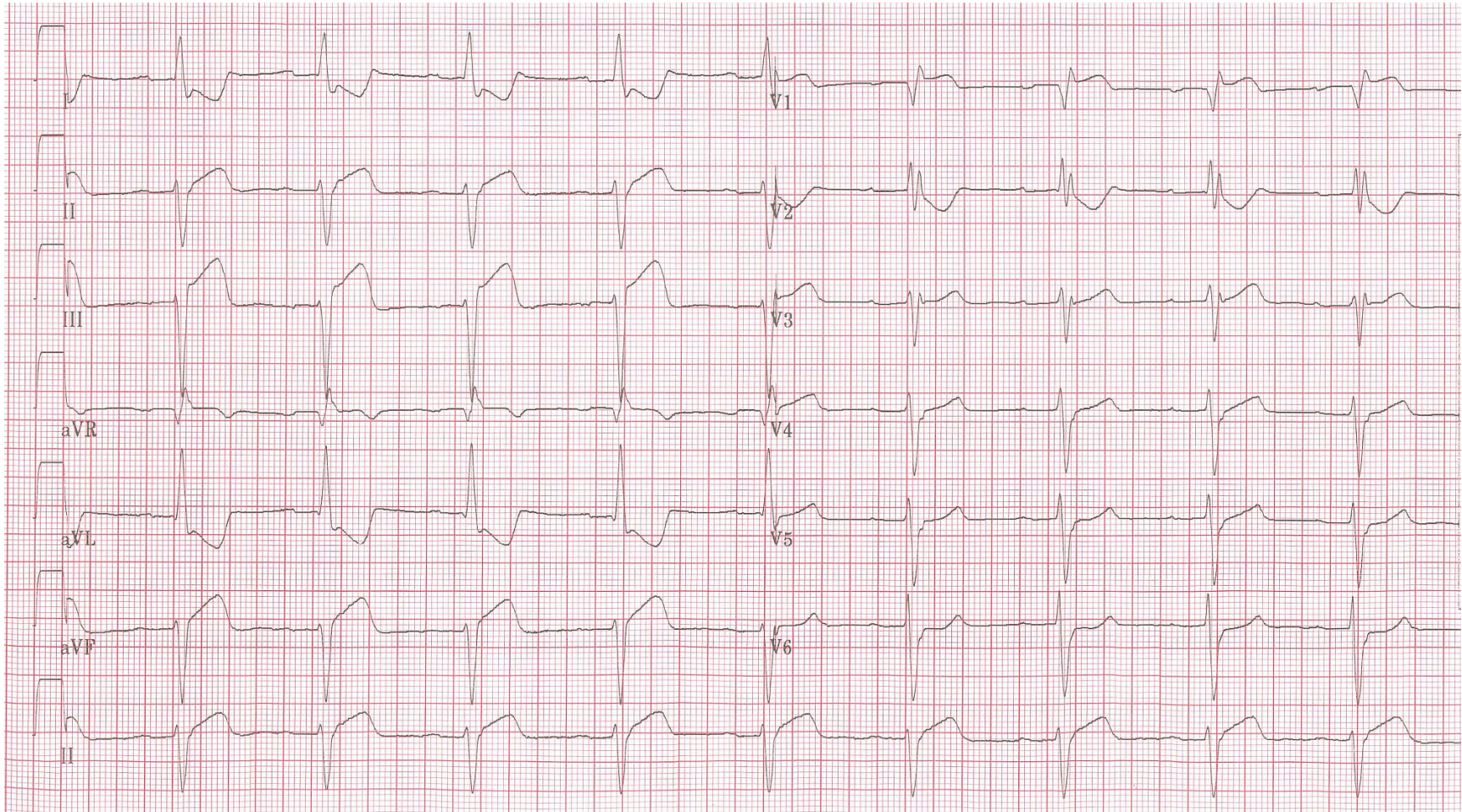












LSB und gepacter  
Rhythmus

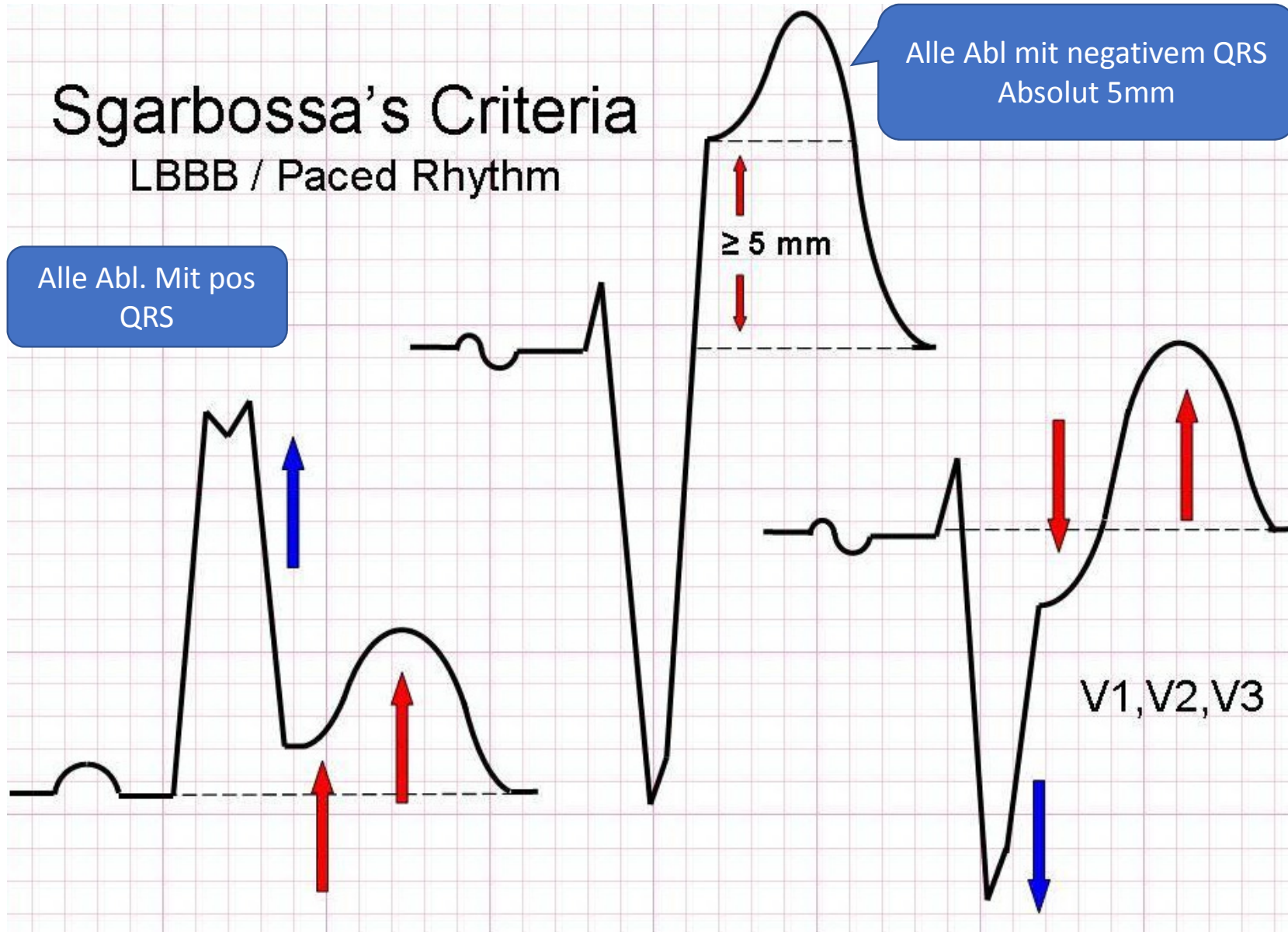


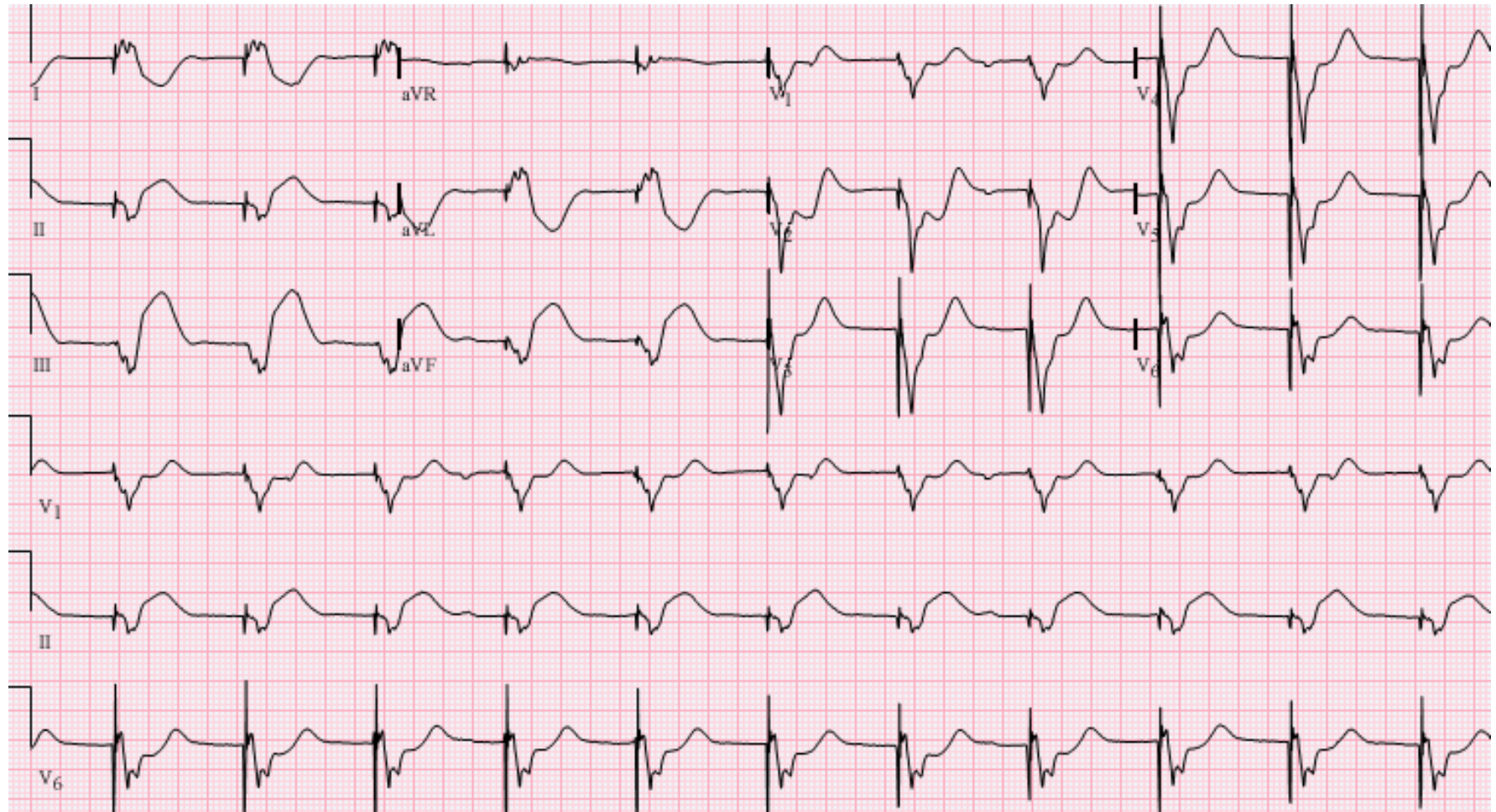
# Sgarbossa's Criteria

LBBB / Paced Rhythm

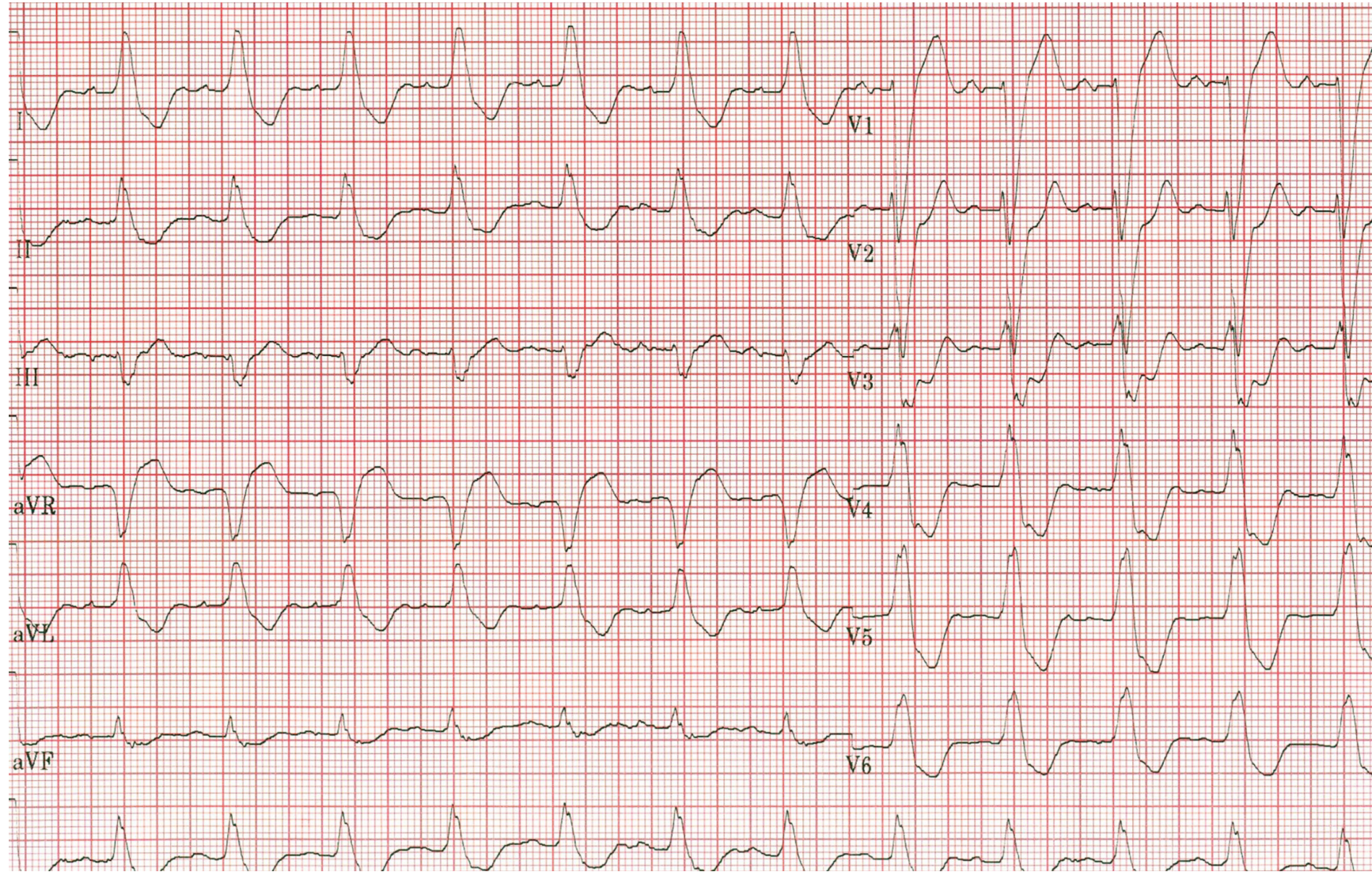
Alle Abl. Mit pos QRS

Alle Abl mit negativem QRS  
Absolut 5mm

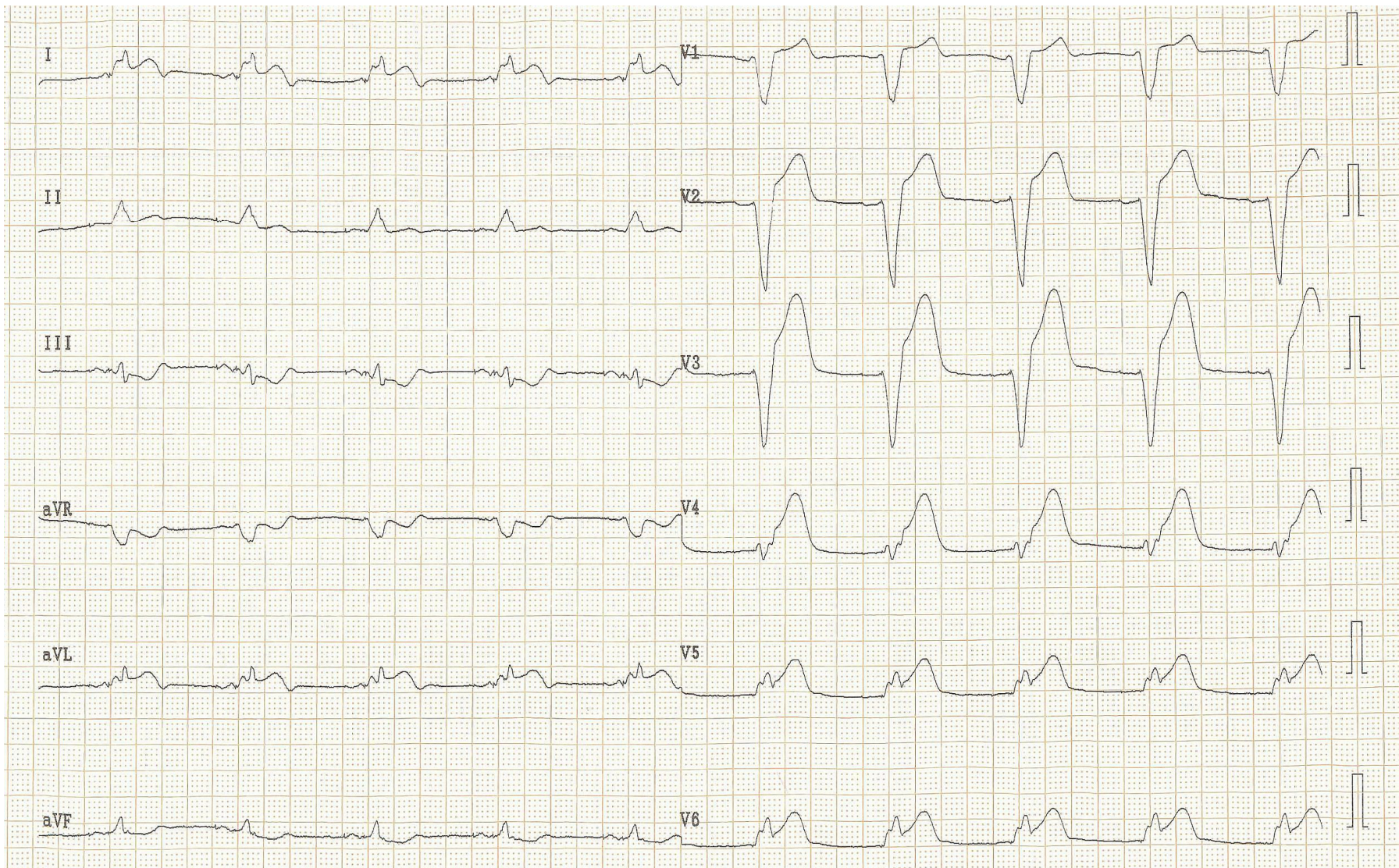




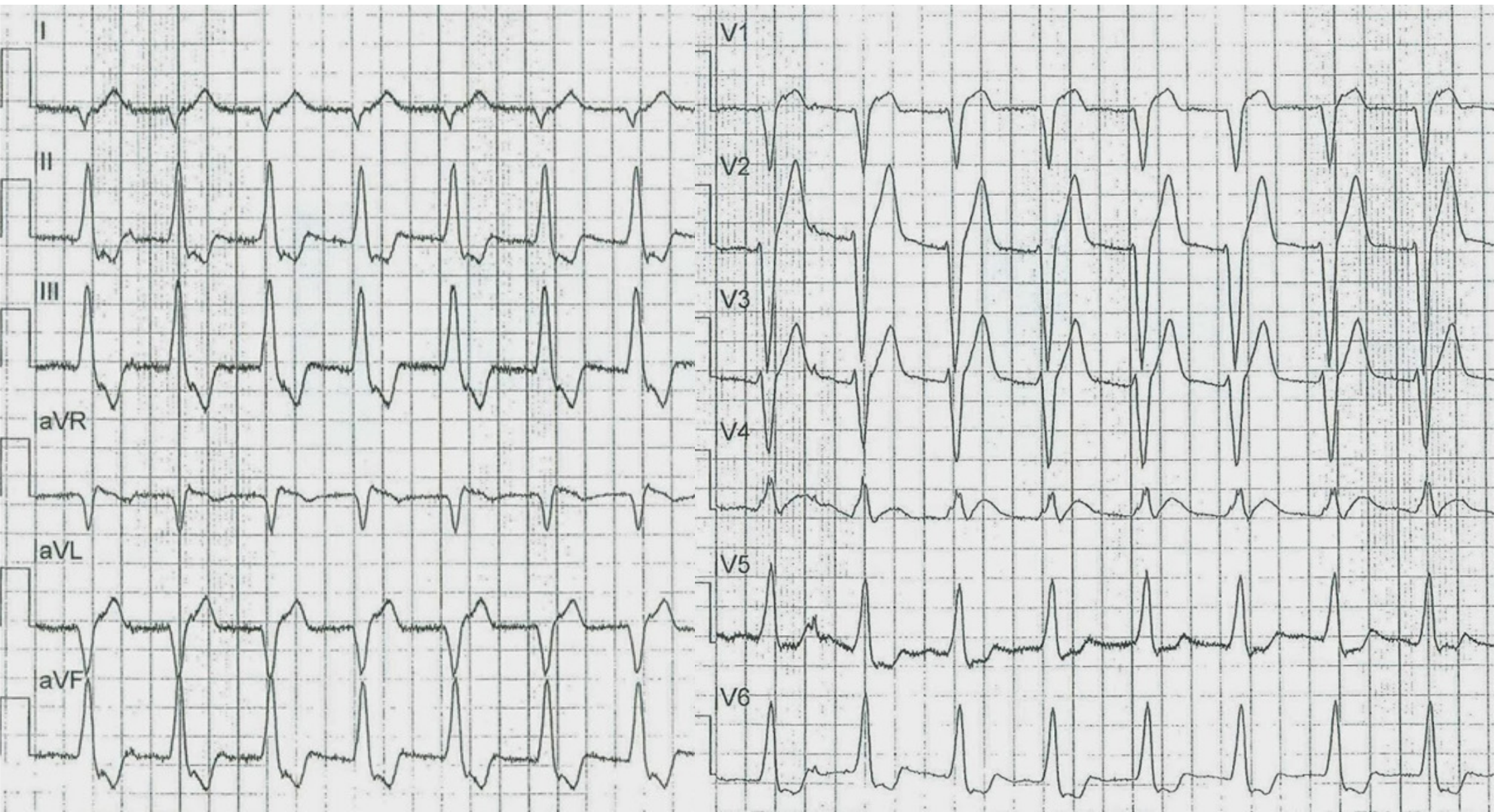




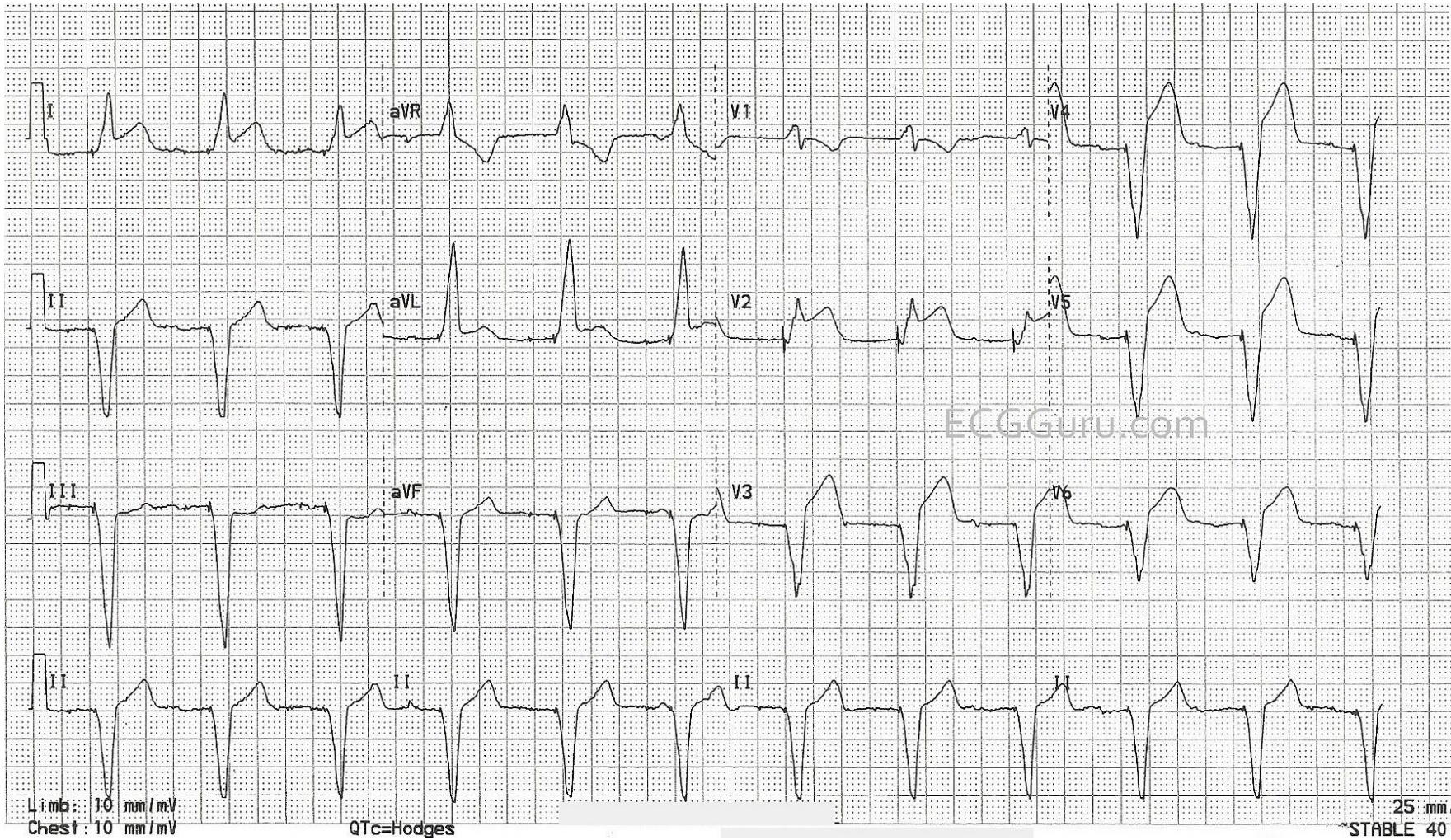












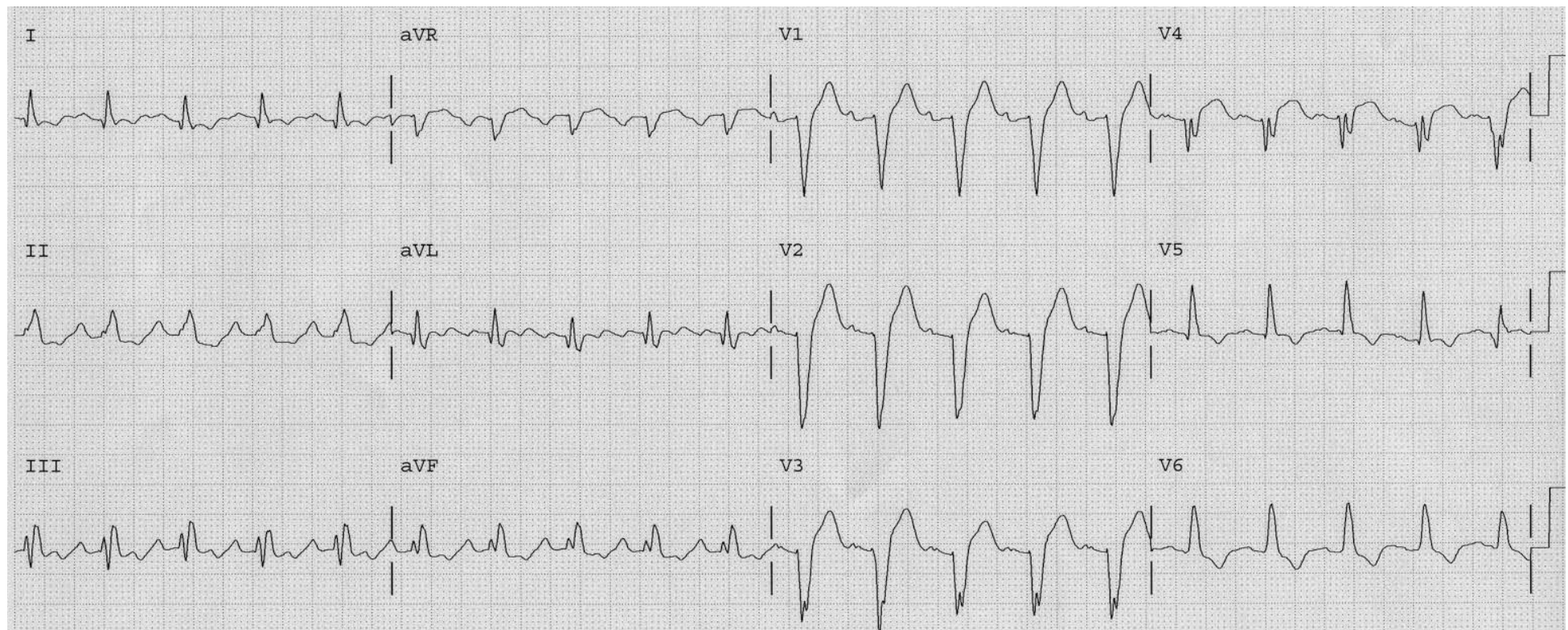
Limb: 10 mm/mV  
Chest: 10 mm/mV

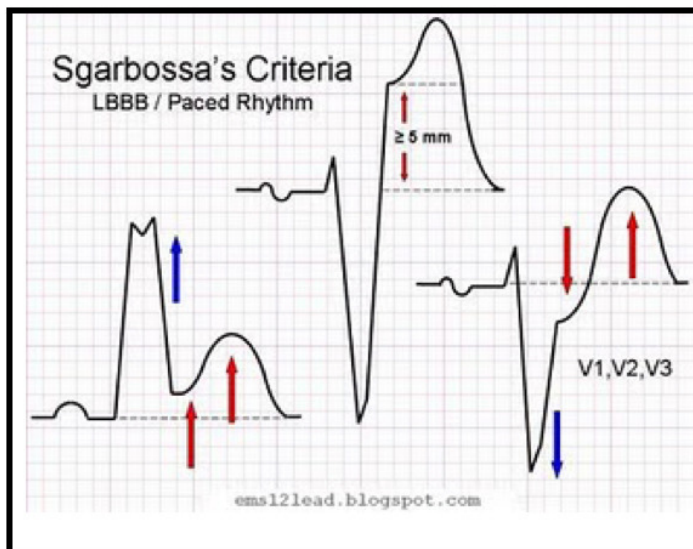
QTc=Hodges

25 mm/s  
STABLE 40



# Verschluss RIVA Mitte





**Table 4. Odds Ratios and Scores for Independent Electrocardiographic Criteria.**

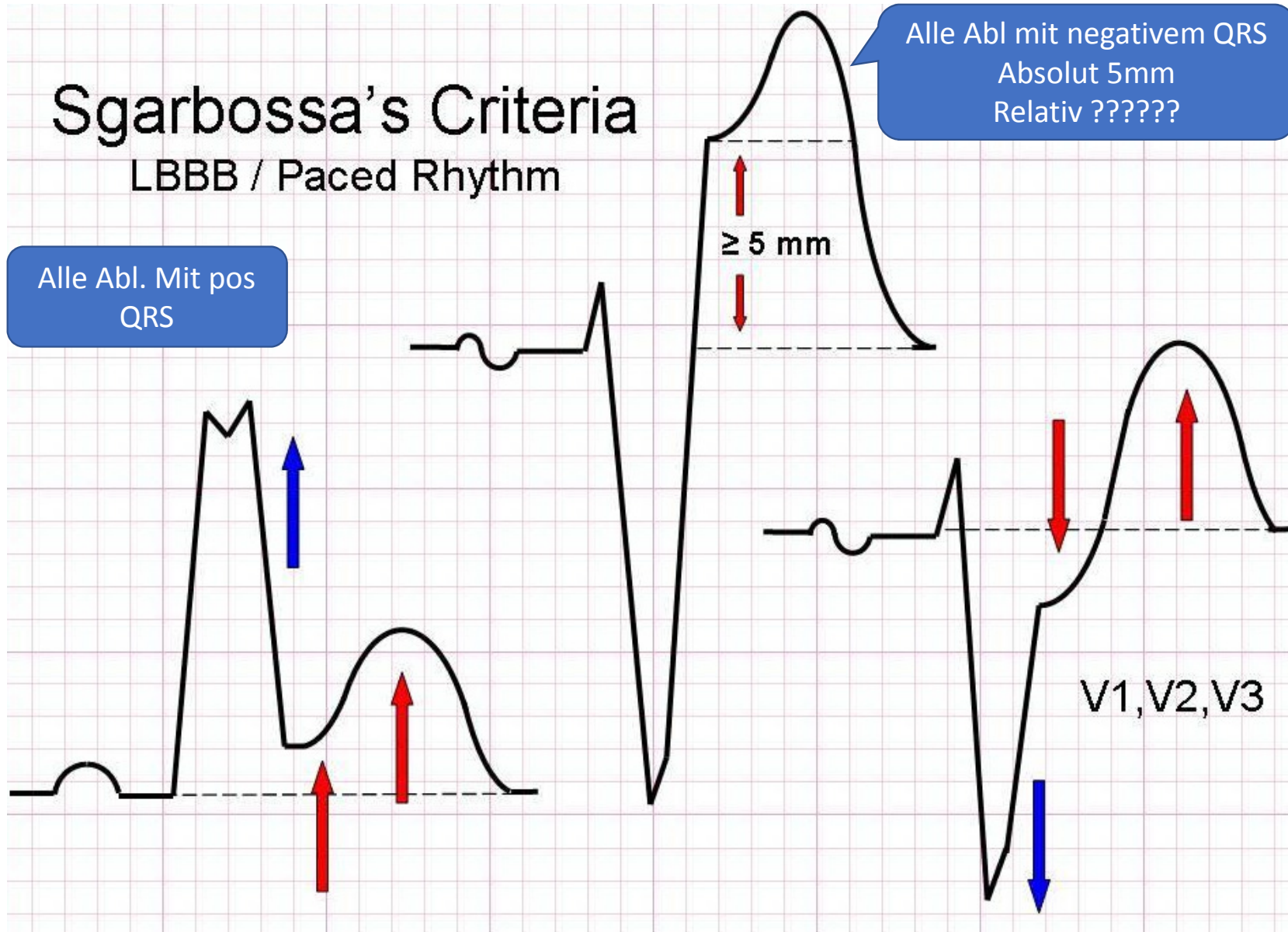
CRITERION	ODDS RATIO (95% CI)	SCORE
ST-segment elevation $\geq 1$ mm and concordant with QRS complex	25.2 (11.6–54.7)	5
ST-segment depression $\geq 1$ mm in lead V <sub>1</sub> , V <sub>2</sub> , or V <sub>3</sub>	6.0 (1.9–19.3)	3
ST-segment elevation $\geq 5$ mm and discordant with QRS complex	4.3 (1.8–10.6)	2

# Sgarbossa's Criteria

LBBB / Paced Rhythm

Alle Abl. Mit pos QRS

Alle Abl mit negativem QRS  
Absolut 5mm  
Relativ ??????

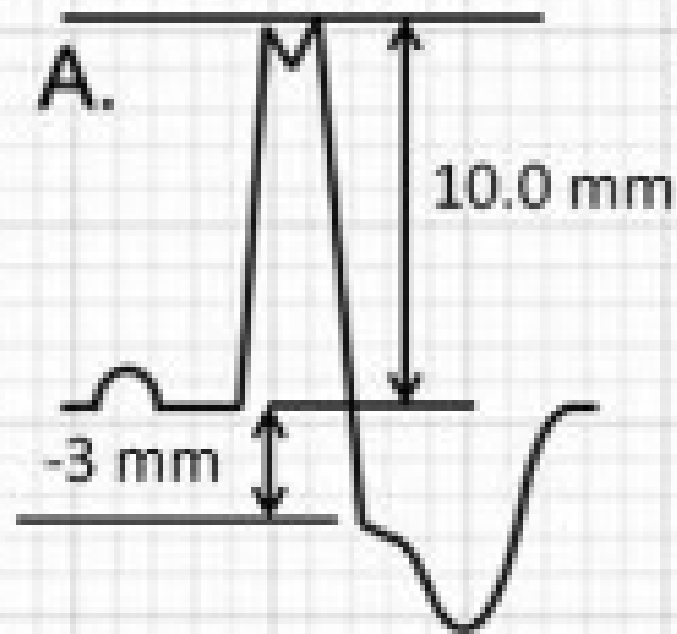


Sgarbossa E et al.  
 Electrocardiographic  
 Diagnosis of  
 Evolving Acute  
 Myocardial Infarction  
 in the Presence of  
 Left Bundle-Branch  
 Block. NEJM 334:  
 481-7

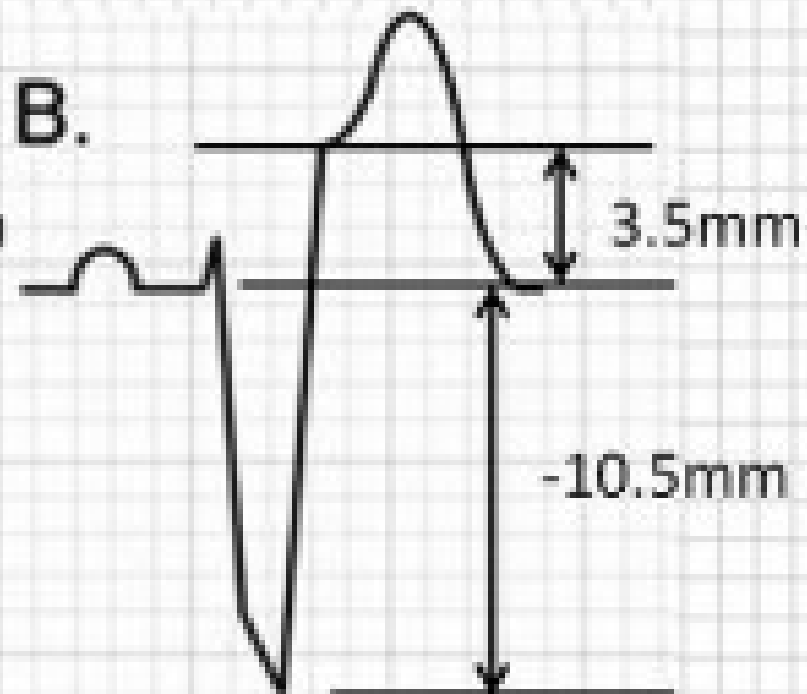


	ST Segment Elevation $\geq$ 1 mm Concordant with the QRS Complex	ST segment depression $\geq$ 1 mm in lead V1-3	ST segment elevation $\geq$ 5 mm and discordant with the QRS complex
Sensitivity	73%	25%	31%
Specificity	92%	96%	92%
(+) LR	9.13	6.25	3.88
(-) LR	0.29	0.78	0.75





$$\text{Ratio} = -3/10 = -0.30$$

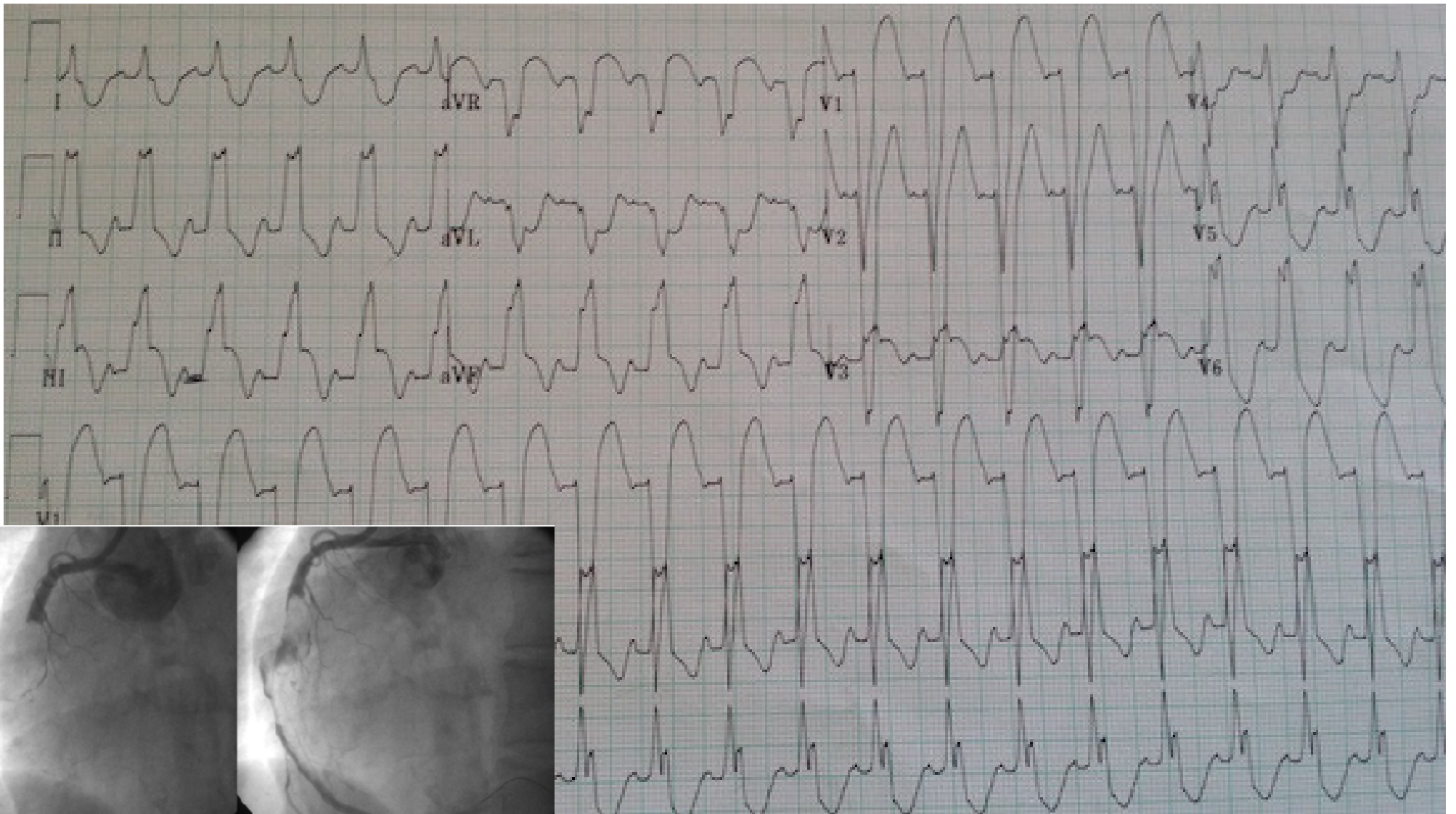


$$\text{Ratio} = 3.5/-10.5 = -0.33$$

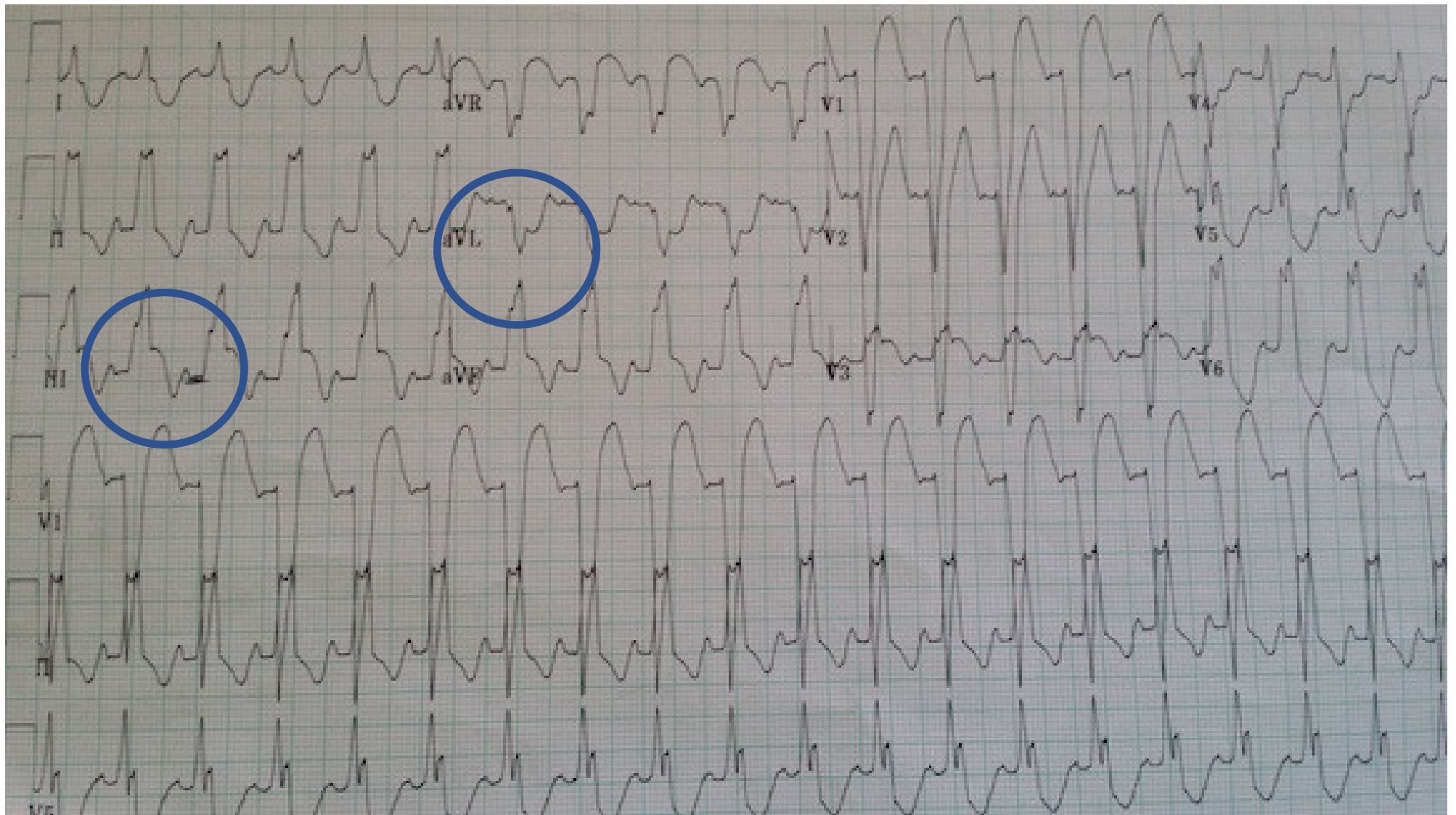
**Table II.** Diagnostic statistics for each set of criteria tested

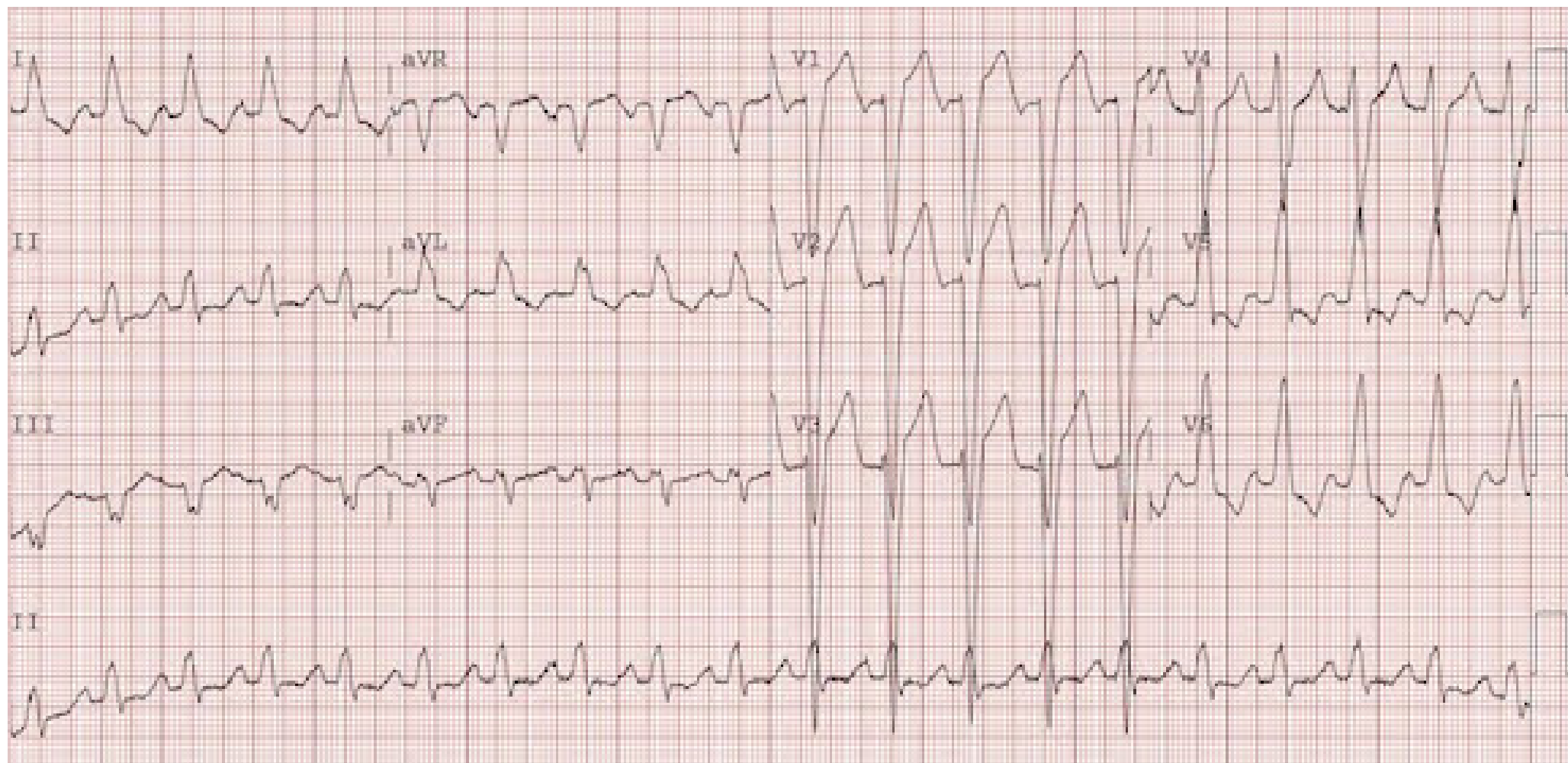
Diagnostic properties of each criteria tested (95% CI)

Criteria	Sensitivity	Specificity	Positive likelihood ratio	Negative likelihood ratio	Odds ratio
Unweighted Sgarbossa	56 (41-70)	94 (92-97)	9.9 (5.6-17.5)	0.47 (0.34-0.65)	21.0 (9.5-46.6)
Weighted Sgarbossa	49 (34-63)	100 (98-100)	$\infty$	0.51 (0.38-0.68)	477.8 (28.1-8130.2)
-0.20 Modified Sgarbossa	84 (74-95)	94 (92-97)	15.0 (8.9-25.4)	0.16 (0.08-0.33)	91.1 (34.6-240.3)
-0.25 Modified Sgarbossa	80 (68-92)	99 (98-100)	99.6 (24.9-399.1)	0.20 (0.11-0.36)	494.0 (102.6-2378.3)
0.3 Overall discordance	64 (50-78)	98 (97-100)	40.1 (14.8-108.6)	0.36 (0.24-0.54)	111.0 (34.8-354.6)



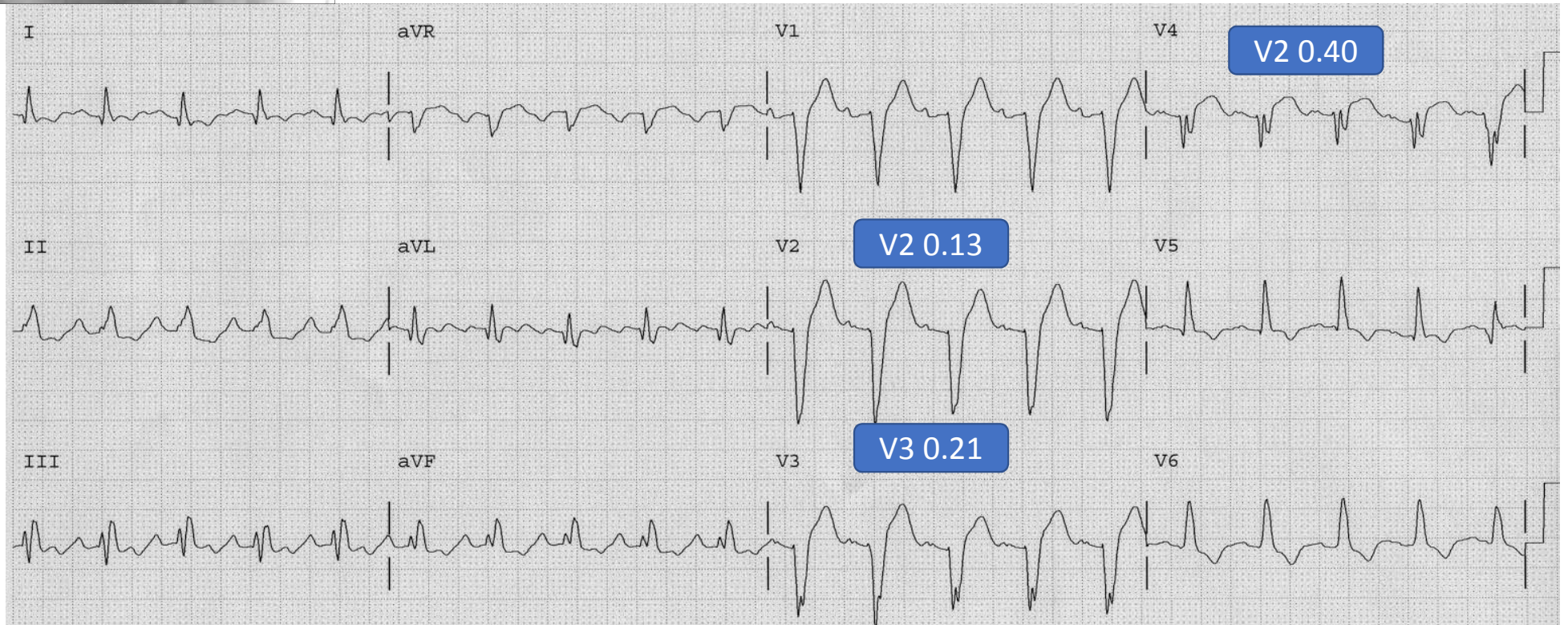




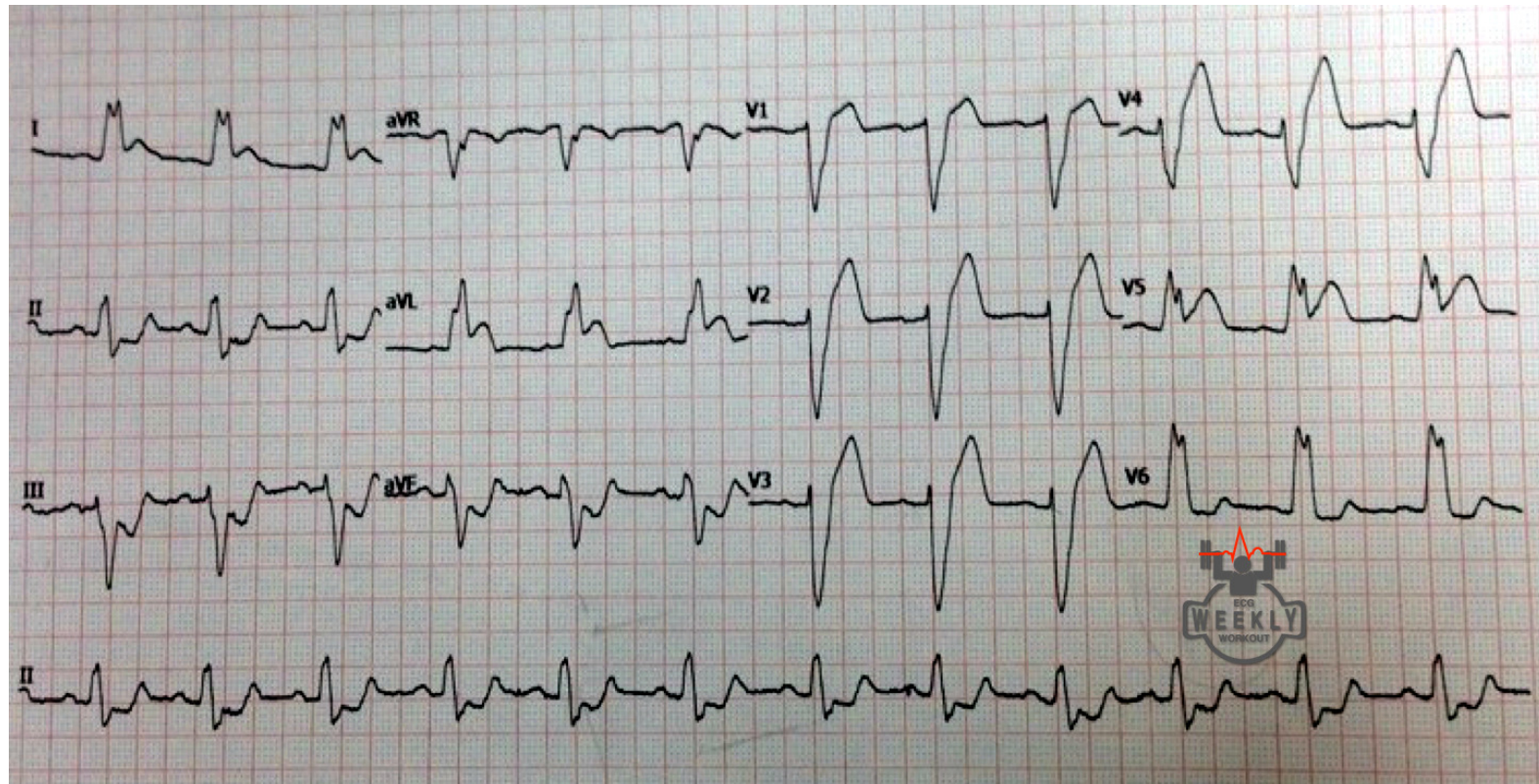


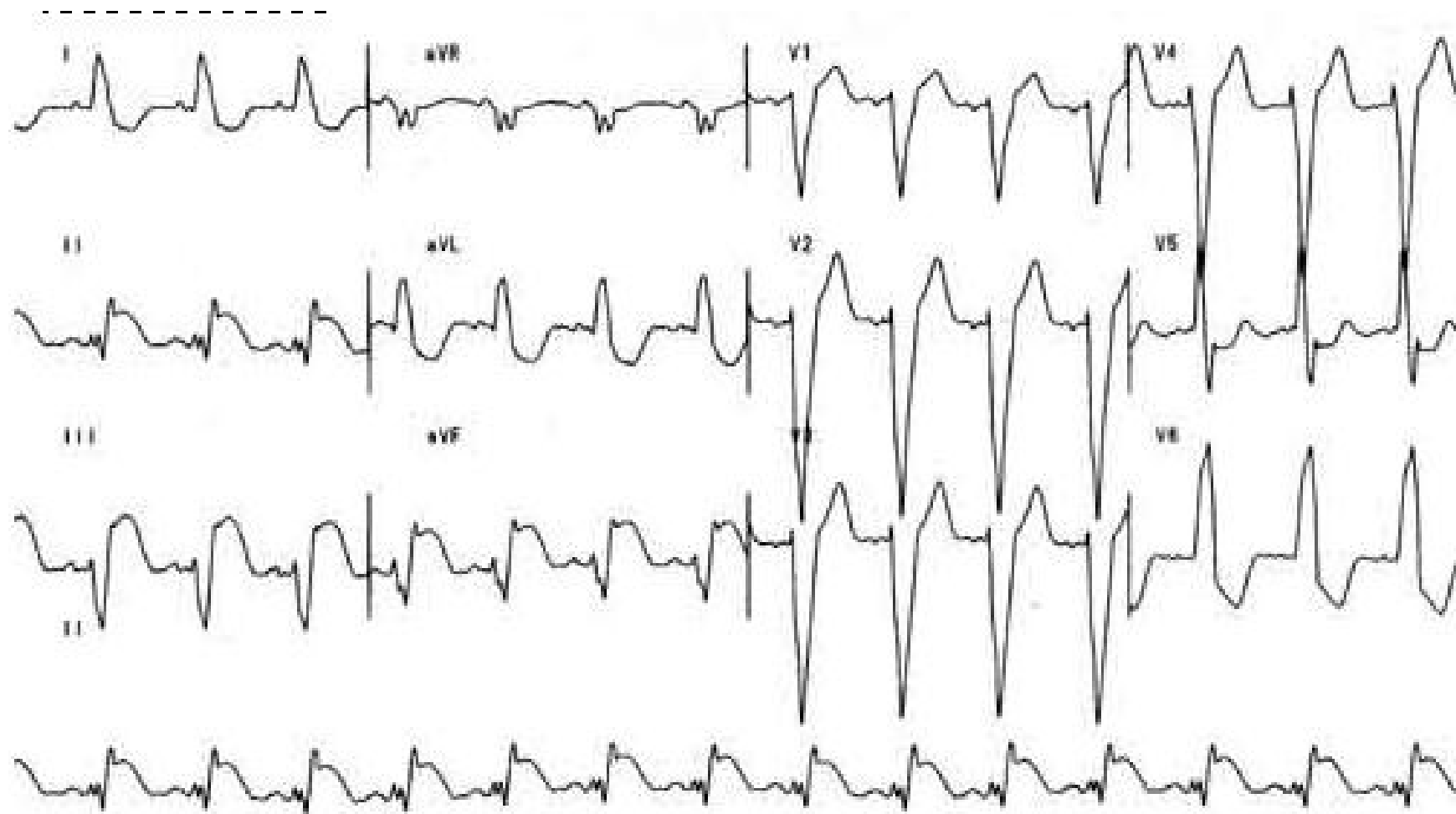


# Verschluss RIVA Mitte







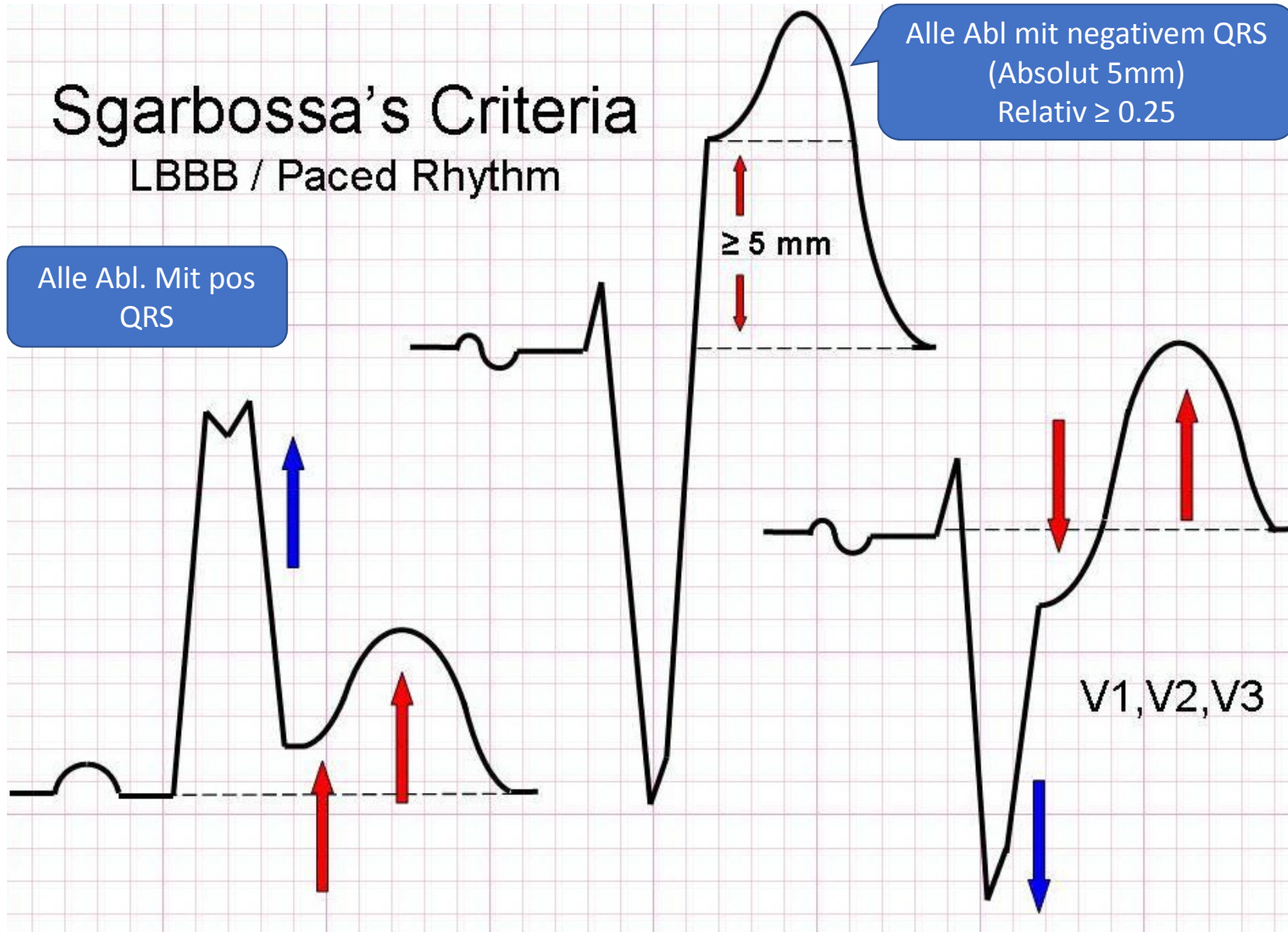


# Sgarbossa's Criteria

LBBB / Paced Rhythm

Alle Abl. Mit pos QRS

Alle Abl mit negativem QRS  
(Absolut 5mm)  
Relativ  $\geq 0.25$





# I fassä zämä

- Hebungsinfarkte sind auch bei Blockbildern und Schrittmacher-EKG meist sicher zu erkennen
- Bei RSB ist in V1-3 Vorsicht geboten, dass Infarkte nicht verpasst werden
- Konkordante Hebungen in positiven Ableitungen und konkordante Senkungen in V1-V3
- Diskordante Hebungen/(Senkungen?) grösser 5mm überall ;vor allem V1-V4 und bei LSB und Pacer (Regel 3 Sgarbossa)
- Bei LSB und Vorderwandinfarkt wird Sens. gesteigert durch modifizierte Regel Nr 3 von Sgarbossa (relative Hebung bezogen auf gesamten negativen QRS Cut off (0.20)-0.25)