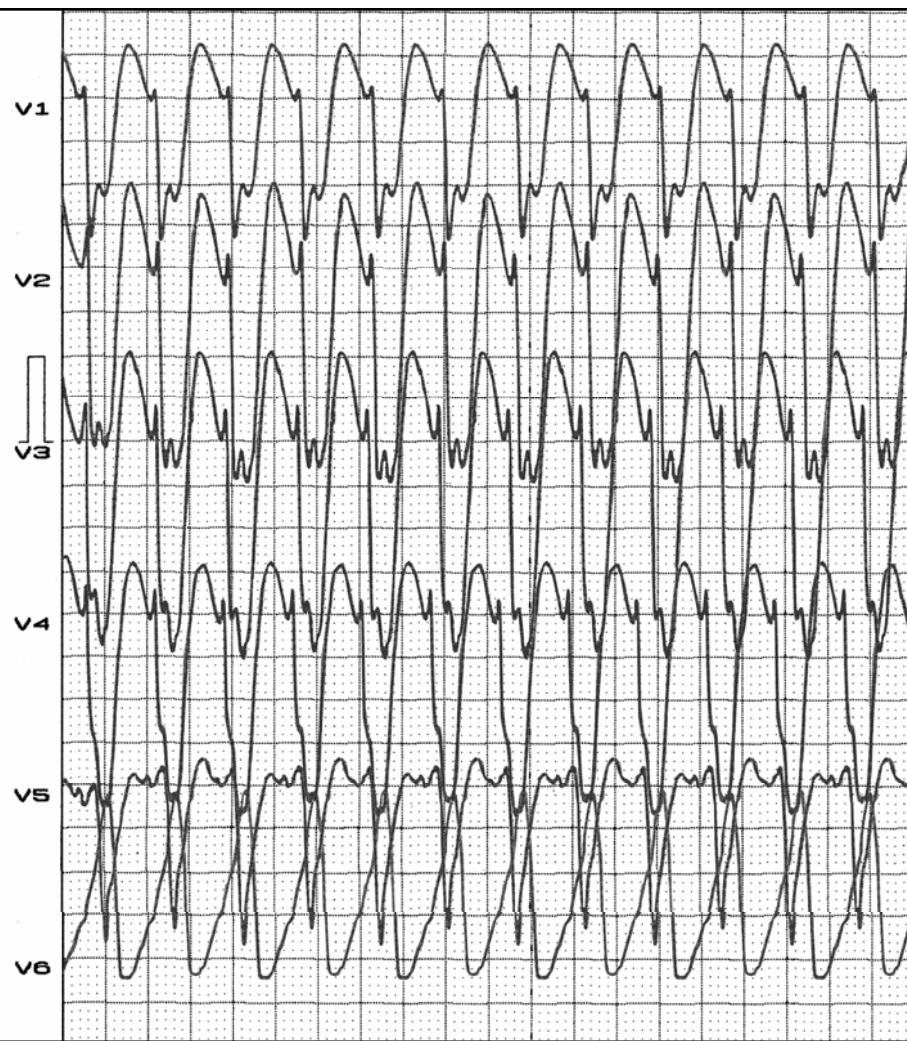
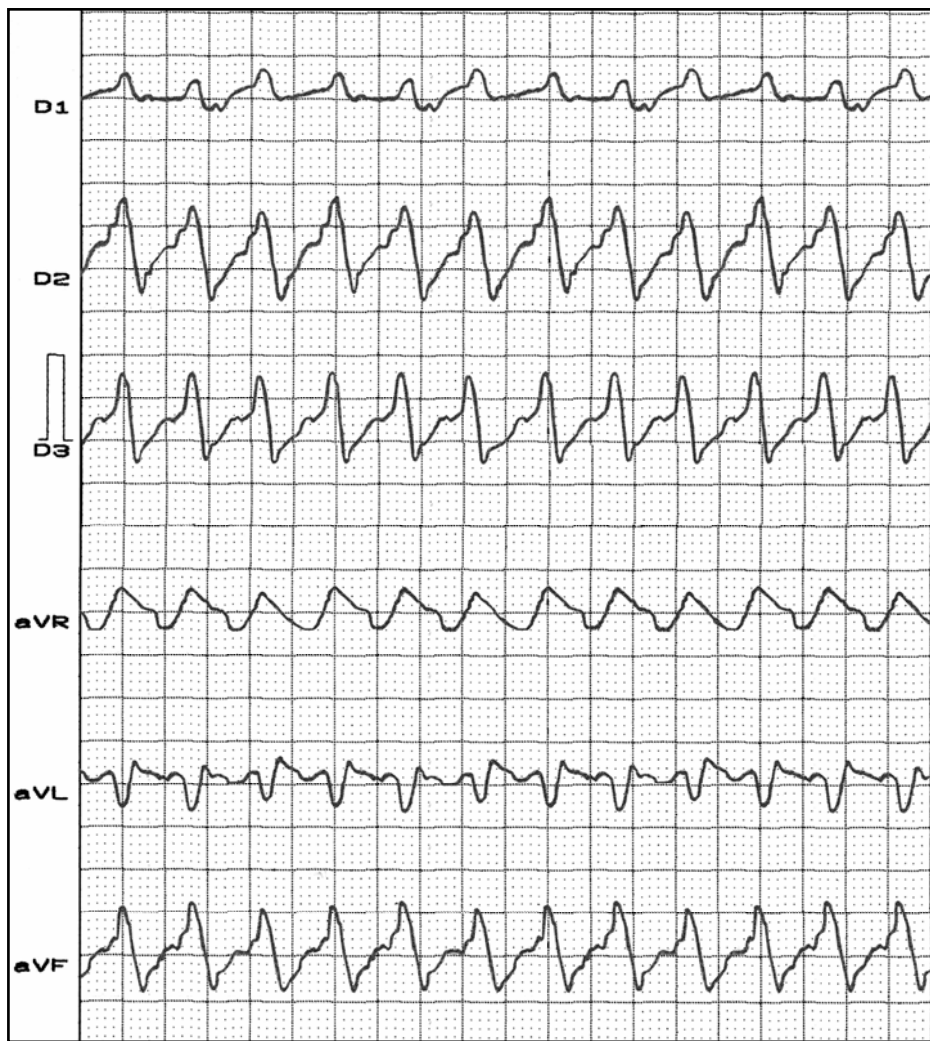
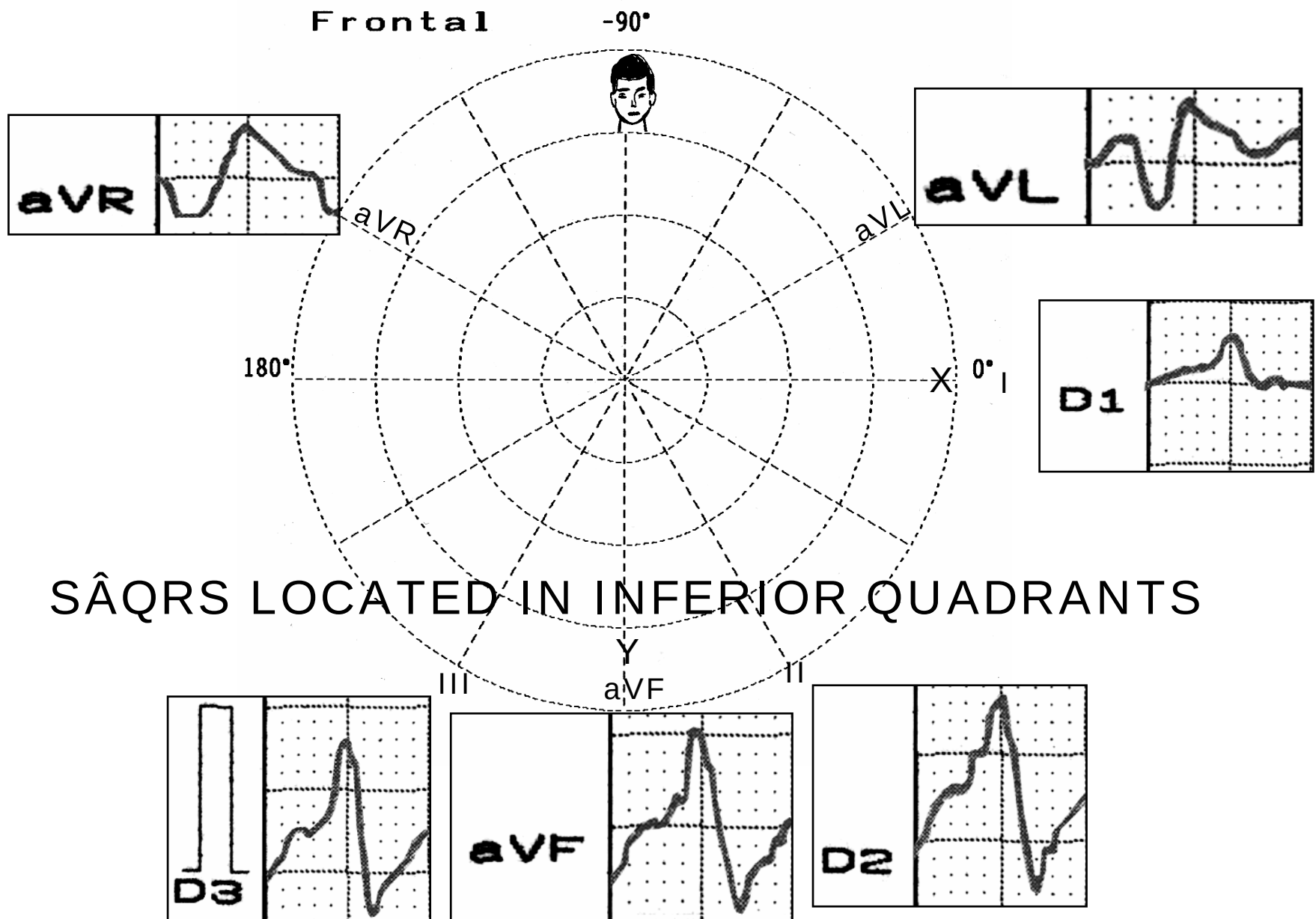


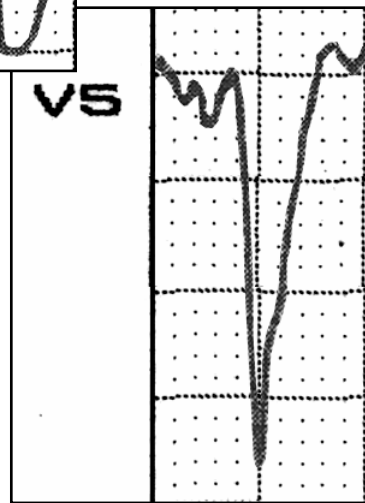
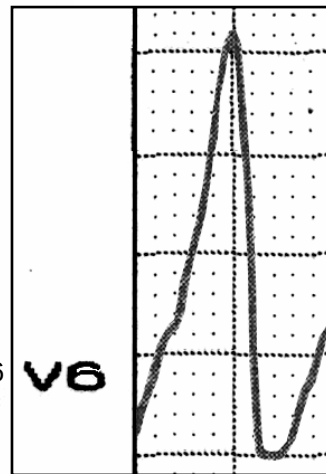
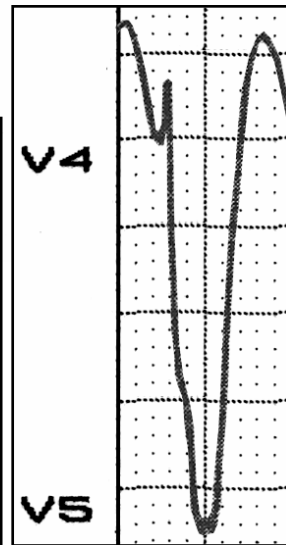
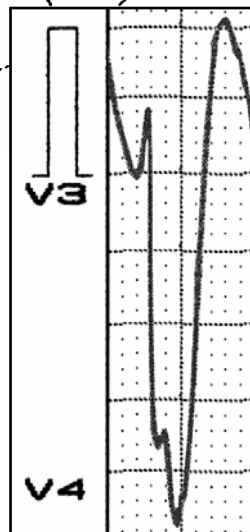
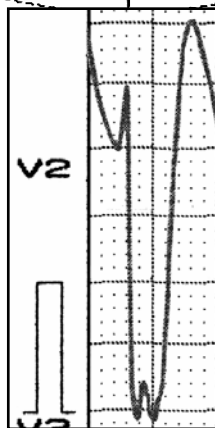
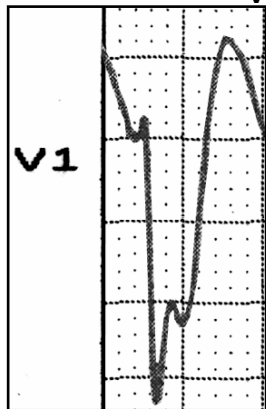
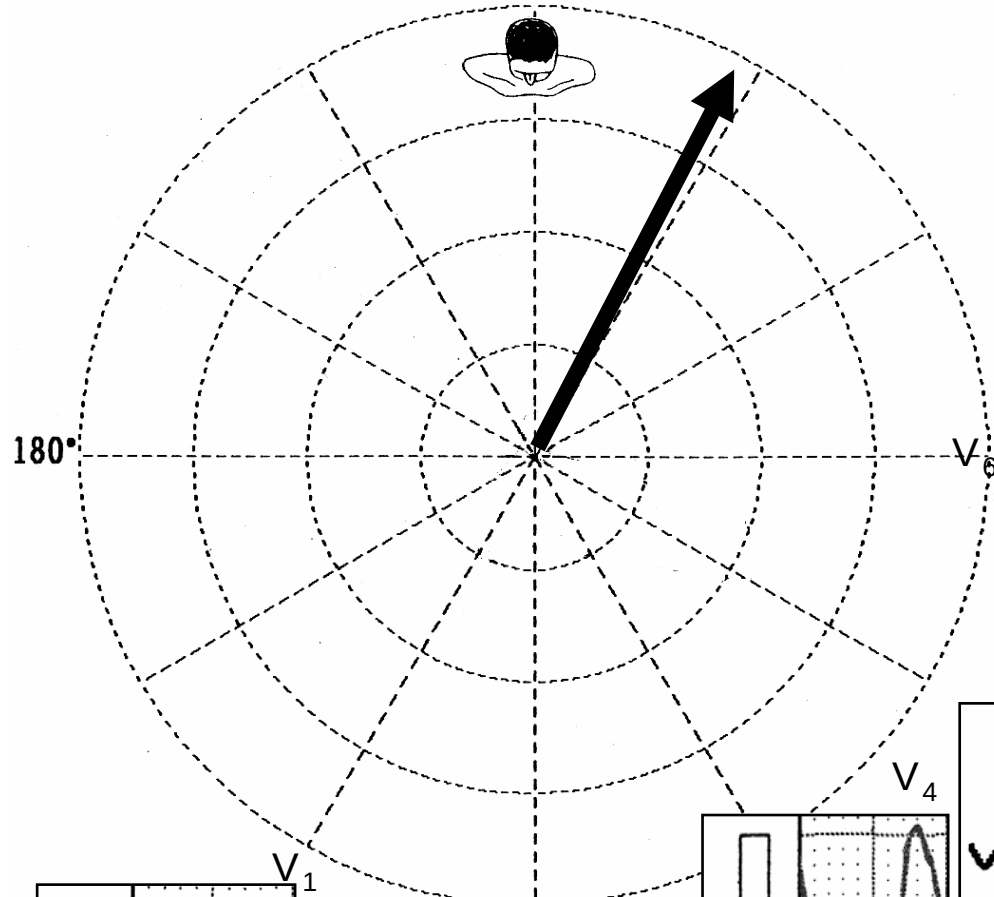


- Professor Pérez Riera,
- As the poet H. Arregui used to say, "Every time I choose a road, wishing it was a different one."
- My road for this broad QRS tachycardia is:
- Sustained monomorphic ventricular tachycardia, originated in the right ventricular outflow tract, with AV conduction 3:2 (AV Wenckebach).
- Ahijuna!!!! (Argentine interjection that expresses defiance, courage.) (let's see how you translate this, dear translator!!!)
- -----
- Spanish
- Profesor Pérez Riera
- Como decia el poeta H. Arregui "Cada vez que elijo un camino, desando otro".
- Mi camino para esta taquicardia de QRS ancho es:
- Taquicardia ventricular monomorfa sostenida, originada en el tracto de salida del ventriculo derecho, con conducción VA 3:2 (Wenckebach VA).
- Ahijuna!!!! (traduci esto traductor querido!!!)
- AB

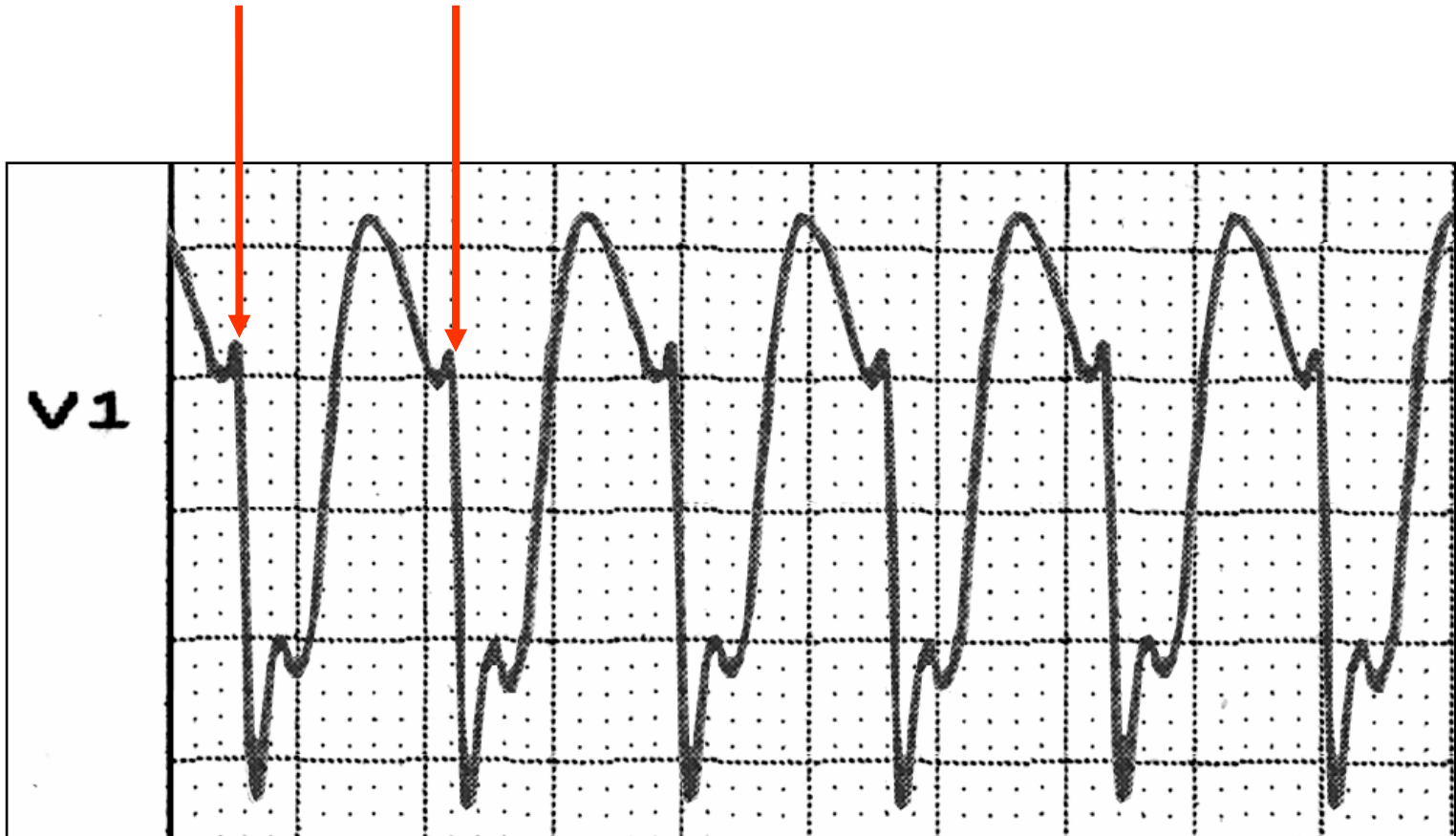
- **With this view we have to think of anomalous pathway to be defined by Gallagher. Another variant is a slow VT, but I lean toward the first.**
- **Regards,**
- -----
- **Ante esta vista se impone pensar en una via anomala A precisar por elGallagher. Otra Variante es una TV lenta pero me inclino por la primera.**
- **Saludos**
- **Rogés**



Horizontal -90°



HEART RATE = 187bpm



QRS DURATION = 200ms

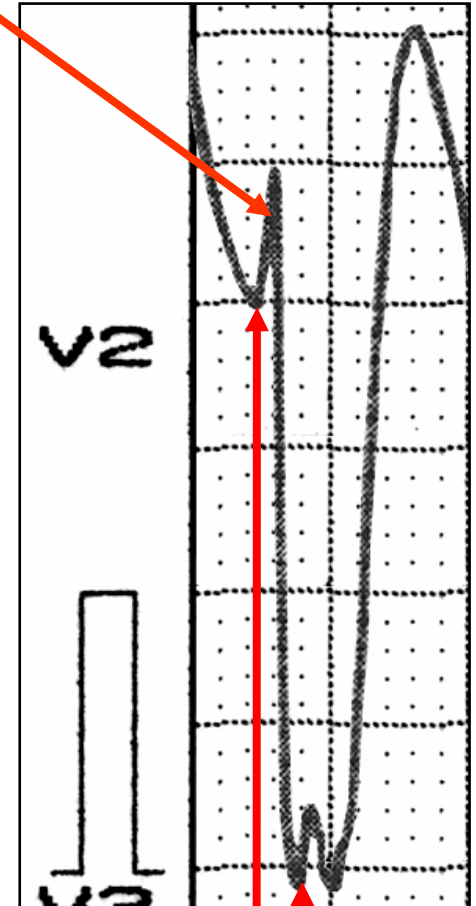
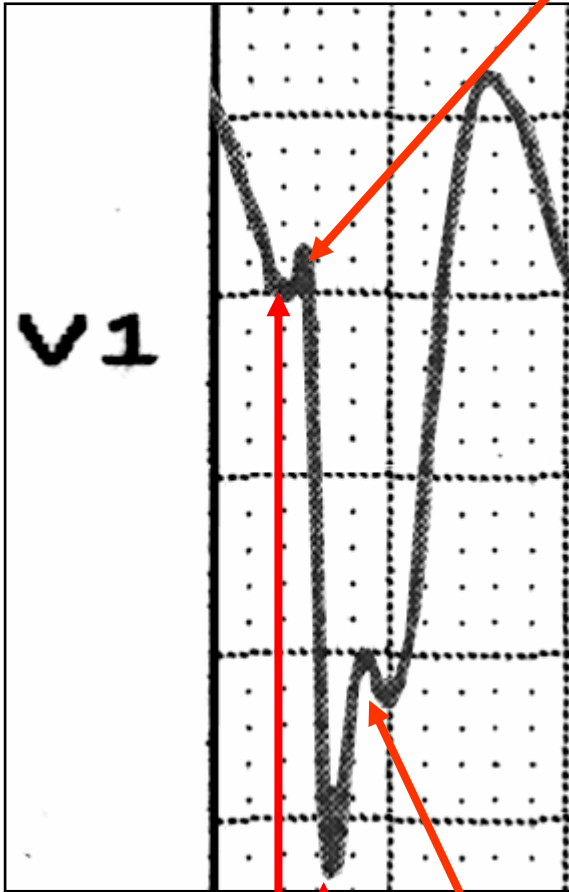
An R-wave <30 ms in V1 or V2

A good clue that this is a SVT with LBBB-like pattern and not VT – and it is a very good clue – is in V1: the slick downstroke to early (< 60ms), and nadir with notching on the upstroke.

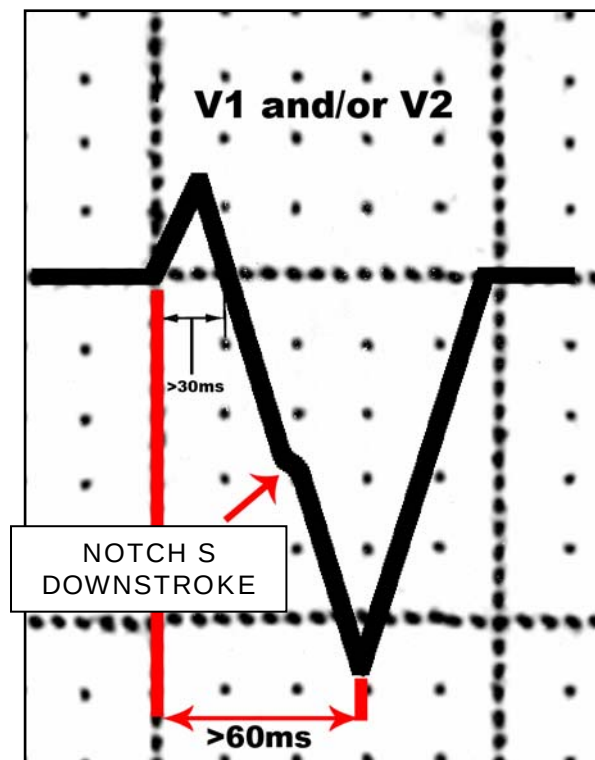
Sure enough, after lidocaine had failed to convert, cardioversion restored sinus rhythm with LBBB.

NOTCH ON THE UPSTROKE

IN V1-V2 THE INTERVAL FROM THE BEGINING OF QRS COMPLEX TO THE NADIR OF S-WAVE = 40ms. THIS FEATURE IS SUGGESTIVE OF SVT.



VT CRITERIA

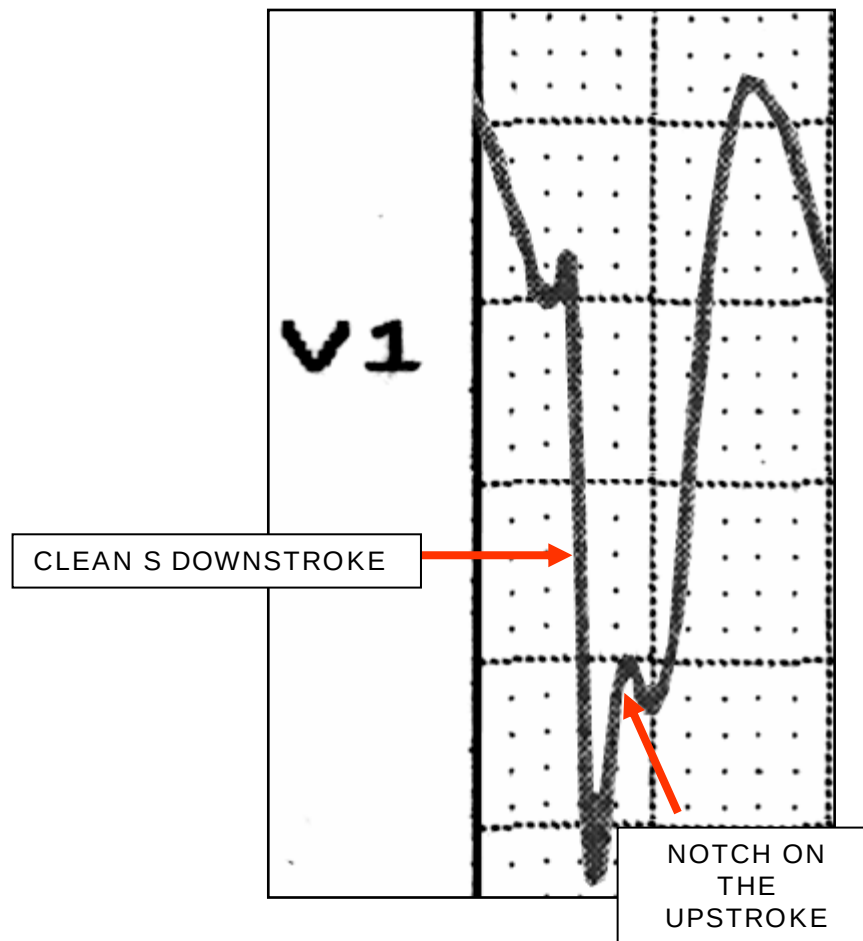


Wide R, notch S downstroke (arrow), delayed S nadir = VT.

Delayed S nadir the distance from the onset of the QRS complex to lowest point of the S wave ≥ 60 ms.

R > 30ms in V1-V2 100% specificity, 36% sensitivity and 100% predictive accuracy(1).

SVT CRITERIA



Narrow r, notch S upstroke (arrow).

In V1 – negative patterns, in narrow r and clean S downstroke in V1 and V2.

1. Kindwall KE, Brown J, Josephson ME. Electrocardiographic criteria for ventricular tachycardia in wide complex left bundle branch block morphology tachycardias. Am J Cardiol. 1988 Jun 1;61(15):1279-83.

The following are highly reliable ECG criteria for SVT:

- QRS duration $\leq 140\text{ms}$ in V1–positive pattern
- QRS duration $\leq 160\text{ms}$ in V1–negative pattern
- QRS pattern in tachycardia same as that in sinus rhythm with BBB
- In V1-negative patterns, a narrow r($\leq 30\text{ms}$) and clean S downstroke
- In V1-positive patterns, a triphasic pattern in V1.
- Interval from the onset of R to the nadir of the S wave in precordial leads $< 100\text{ms}$ ¹
- Absence of QRS concordance positive pattern and negative, across all precordial leads.

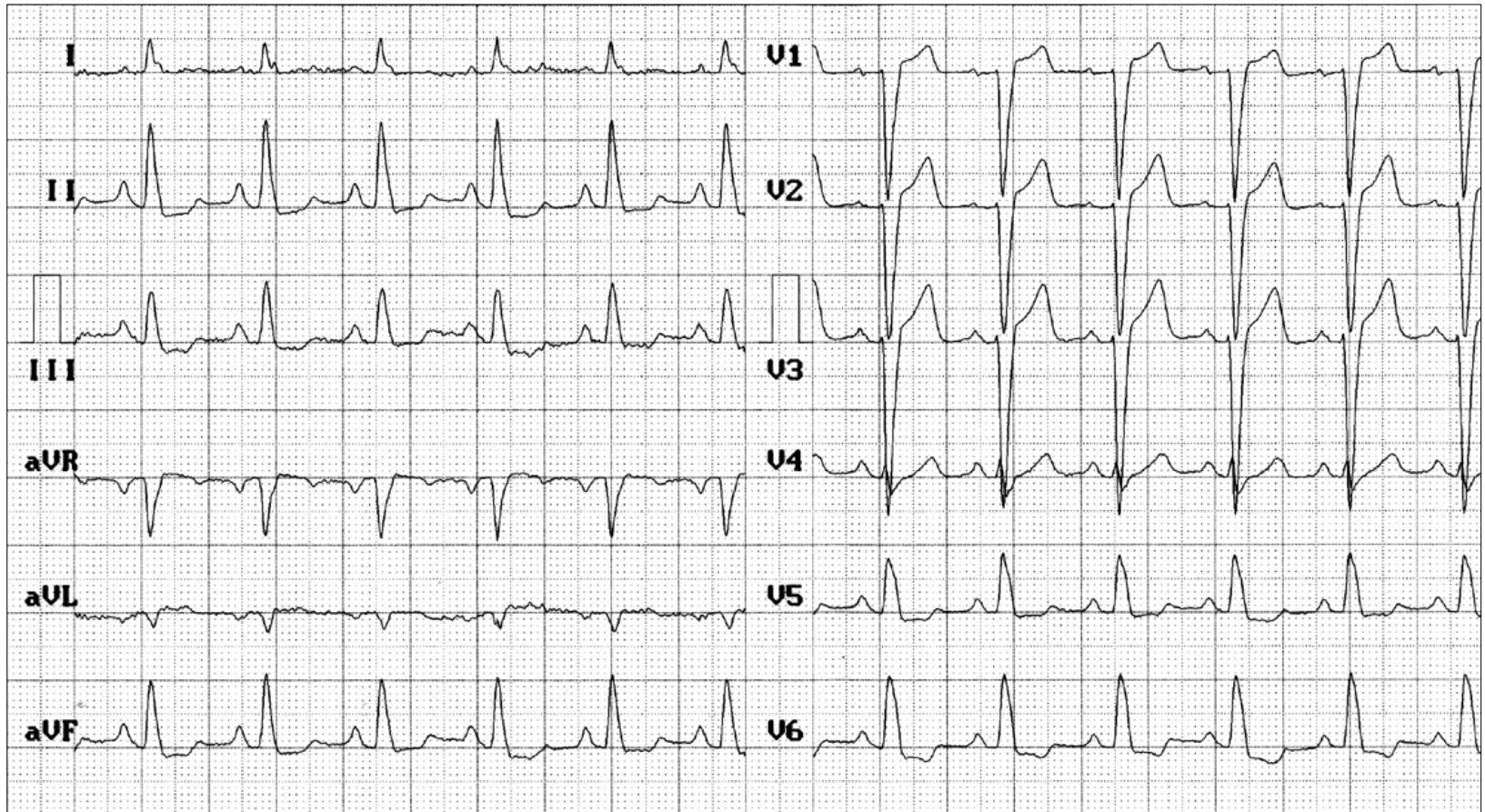
Portuguese

Os seguintes são critérios ECG de alto valor para TSV:

- Duração do QRS $\leq 140\text{ms}$ em V1 quando o padrão é positivo
- Duração do QRS $\leq 160\text{ms}$ em V1 quando o padrão é negativo
- Padrão do QRS durante a taquicardia igual ao padrão de bloqueio de ramo durante o ritmo sinusal
- Um padrão em V1 negativo com r inicial estreita ($\leq 30\text{ms}$) e S “limpa” na sua rampa descendente em V1 e V2
- Um padrão em V1 positivo trifásico
- Intervalo desde o início da R ao nadir da S nas precordiais $< 100\text{ms}$ ¹
- Ausência de padrão concordante positivo ou negativo em todas as precordiais.

1. Brugada P, Brugada J, Mont L, Smeets J, Andries EW. new approach to the differential diagnosis of a regular tachycardia with a wide QRS complex. Circulation. 1991 May;83:1649-1659.

ECG AFTER EVENT

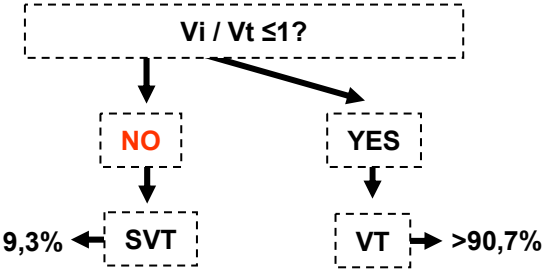


QRS pattern in sinus rhythm with LBBB, similar QRS pattern during tachycardia.

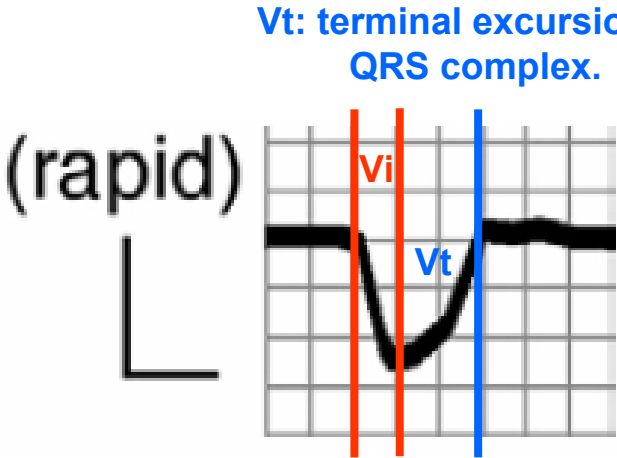
The rationale proposed for this criterion is that during WCT due to SVT, the initial activation of the septum should be invariably rapid and the intraventricular conduction delay causing the wide QRS complex occurs in the mid- to terminal part of the QRS. In contrast, in WCT due to VT, there is initial slower muscle-to-muscle spread of activation until the impulse reaches the His-Purkinje system, after which the rest of the ventricular muscle is more rapidly activated.(1)

FOURTH STEP

Vi: initial excursion velocity of QRS complex.
Vt: terminal excursion velocity of QRS complex

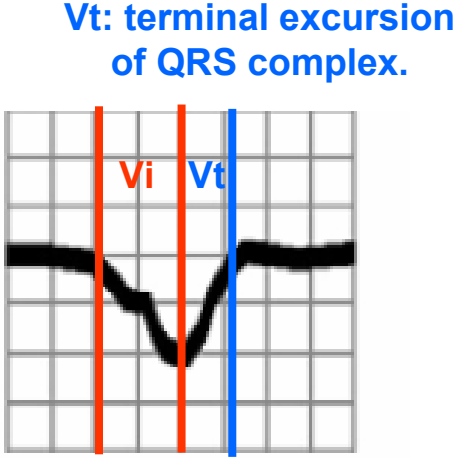


Ventricular activation-velocity ratio The vertical excursion (in millivolts) recorded during the initial (Vi) and terminal (Vt) 40 ms of the QRS complex. If $\leq 1 = VT$ or $> 1 = SVT$.



Vi: initial excursion of QRS complex.
 $\leq 1 = TV$

(slow)
QS
(notched)



Vi: initial excursion of QRS complex.
 $> 1 = TVS$

1. Josephson ME. (2005) Using the twelve-lead electrocardiogram to localize the site of origin of ventricular tachycardia. *Heart Rhythm* 2:443–446