

Diagnóstico ECG: Atraso final de condução tipo 1A da minha classificacao. O atraso ocorre próximo de aVR com eixo superior confundindo com LAFB(or BDAS)



Vectorcardiographic loop in the frontal plane **Right End Conduction Delay(RECD)** Type IA. It is clear that only type IA may be confused with LAFB. (see next slide) Variante normal em mas de 98% dos casos.

Distribution of the three fascicles of the right branch of the His bundle in the RV free wall (Lev 1964-1968; Mahaim 1931; Lenegre 1958)



Distribution of three divisions of the right branch in the RV free wall.

### VCG type I **RECD** variants according to QRS rotation on FP



Vectorcardiographic loop in the frontal plane of the three subtypes of Type I. It is clear that only type IA may be confused with LAFB.

### New proposal of VCG classification of **RECD** according to QRS loop in the FP

- 1) Type I or right anterior subdivision block (**de Micheli 1987**)
- a) Type IA: QRS loop predominantly located in the left superior quadrant, (SÂQRS with extreme deviation to the left), counterclockwise rotation and RECD located in the right superior quadrant. Very similar to LAFB;(the present case)
- b) Type IB: QRS loop pointed, clockwise or in eight, with the initial portion located in the left inferior quadrant and RECD located in the right superior quadrant. SÂQRS difficult to determine or shifted to the right;
- c) Type IC: QRS loop of clockwise rotation with SÂQRS with no deviation or with a mild shift to the right. In the three types with RECD located in the right superior quadrant;

Classification of Type I in subtypes IA, IB and IC.

## Typical case of **RECD** type IA showing ECG/VCG correlation in the Frontal Plane



# Differential diagnosis between **RECD** type IA and LAFB

	<b>RECD type IA</b>	LAFB
Depth of S wave in II and III	SII > SIII (inconstant)	SIII > SII (inconstant)
I and aVL	Rs	Qr
Prominent and broad R wave in aVR	Present and characteristic: QR or qR.	Absent: Qr or QS.
Vector of initial 10 to 20 ms	Downward and to the left (inconstant)	Downward and to the right. (inconstant)
Rapid passage from left to right	Yes	No
RECD	In the right superior quadrant.	With or without delay, above and to the left.
Triphasic pattern in V <sub>1</sub> or V <sub>1</sub> and V <sub>2</sub> .	Very frequent.	Possible. Final R' wave or r' wave of $V_2$ is greater than in $V_3$ R and $V_4$ R, indicating that the final forces are heading predominantly to the left.

Criteria for differential diagnosis between RECD type IA and LAFB.

## **ECG/VCG correlation between RECD type IA and LAFB**

