

Figure 11.1A.

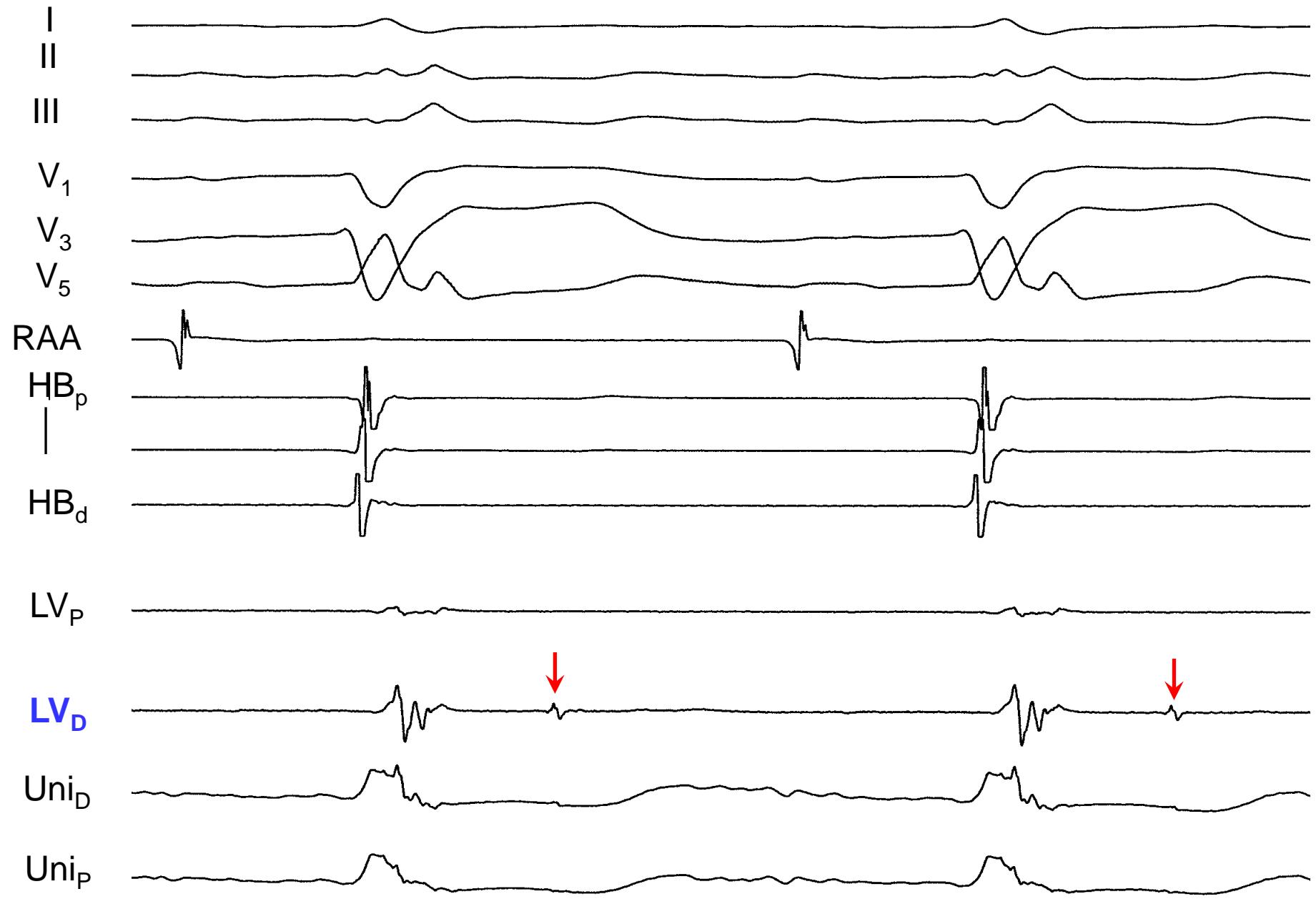


Figure 11.1B.

100 ms

- Assess location of diseased area (e.g. scar) by echo, ventriculogram, MRI, etc.
- Predict exit point of each clinical VT



VT induction; Predict exit point of each VT



- Substrate mapping; identify the extent of scar
- Tag all abnormal potentials



- Pace mapping from site with abnormal potentials,
particularly in the area predicted to be exit point of VT



- Entrainment mapping if VT
is induced by pacing
- Ablate if:
12/12 match with VT
 $S\text{-QRS} = EGM\text{-QRS}$

Ablate here if 12/12
match with any VT



- Ablate as many abnormal potentials as
possible



- Attempt to induce VT
- If VT remains inducible:
 - Repeat pacing mapping or entrainment mapping
 - More substrate ablation

Figure 11.2.

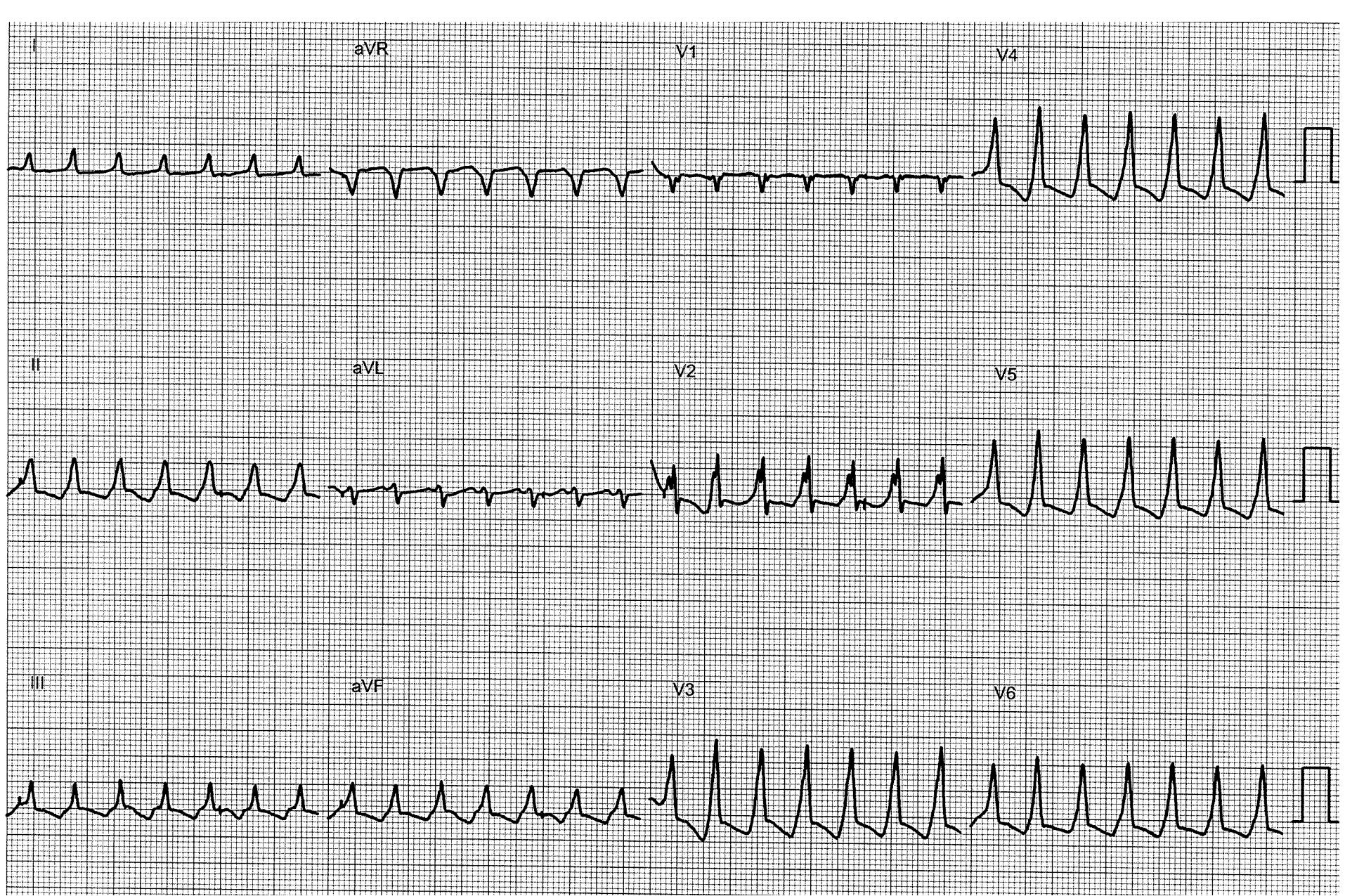


Figure 11.3A.

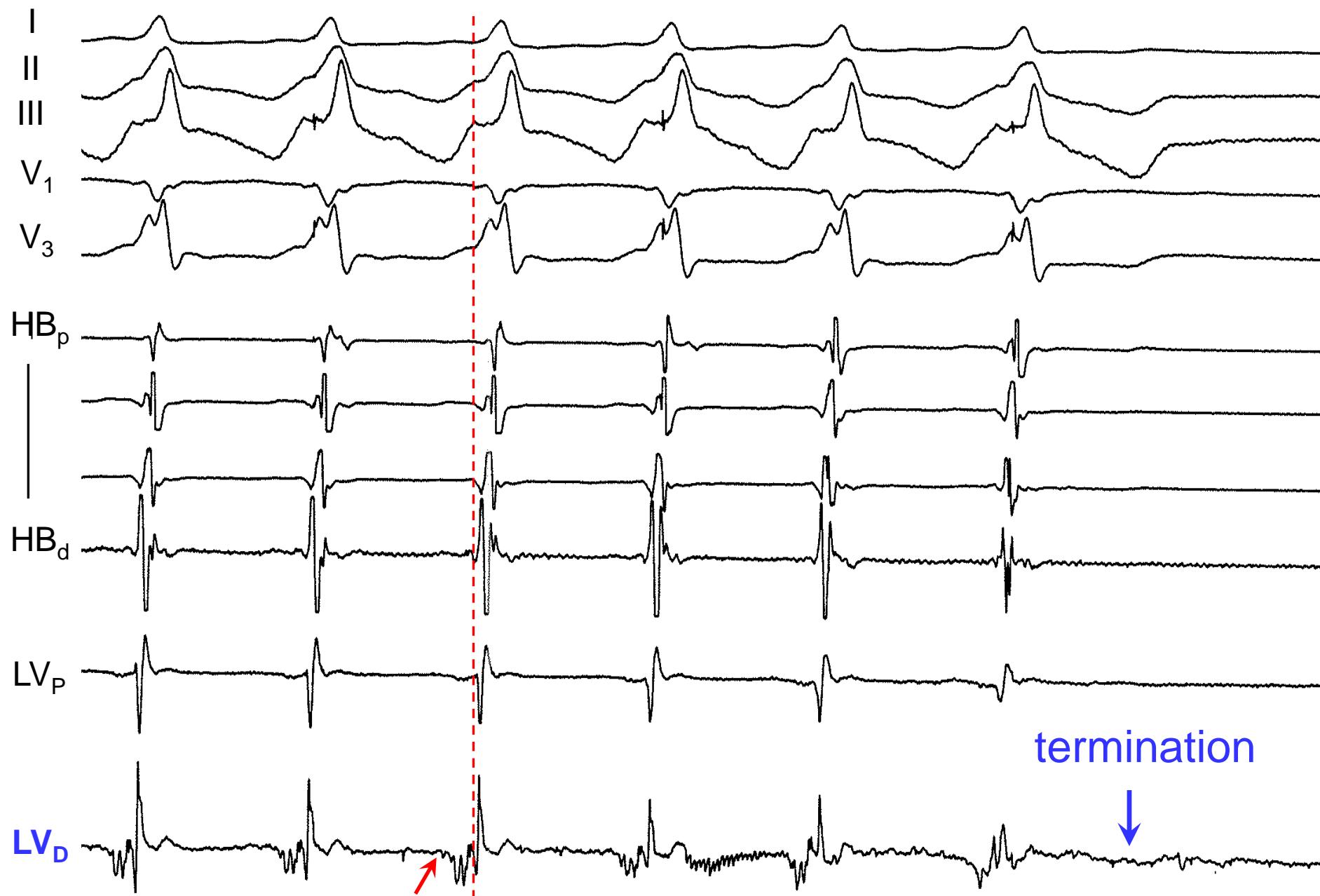


Figure 11.3B.

200 ms

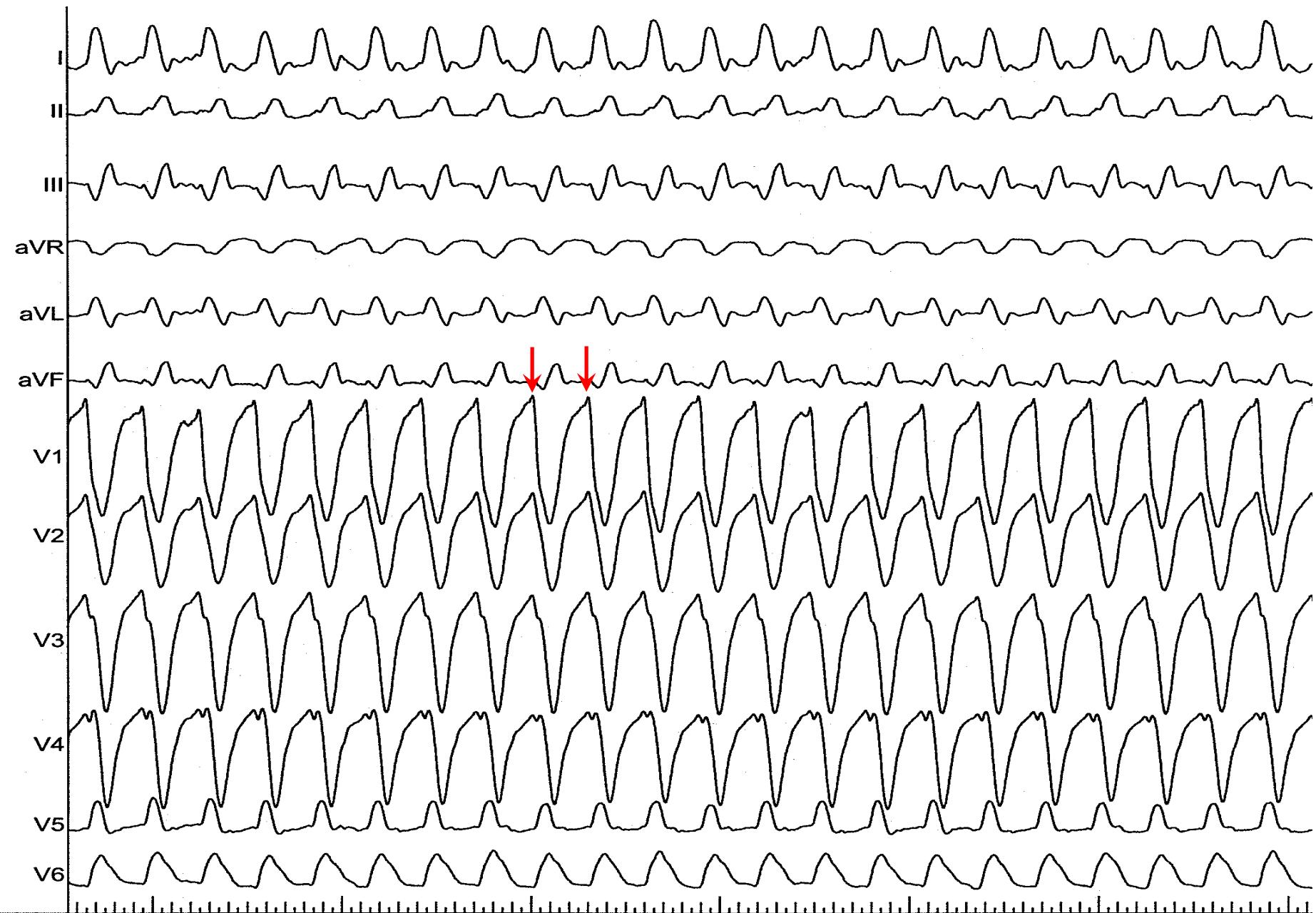
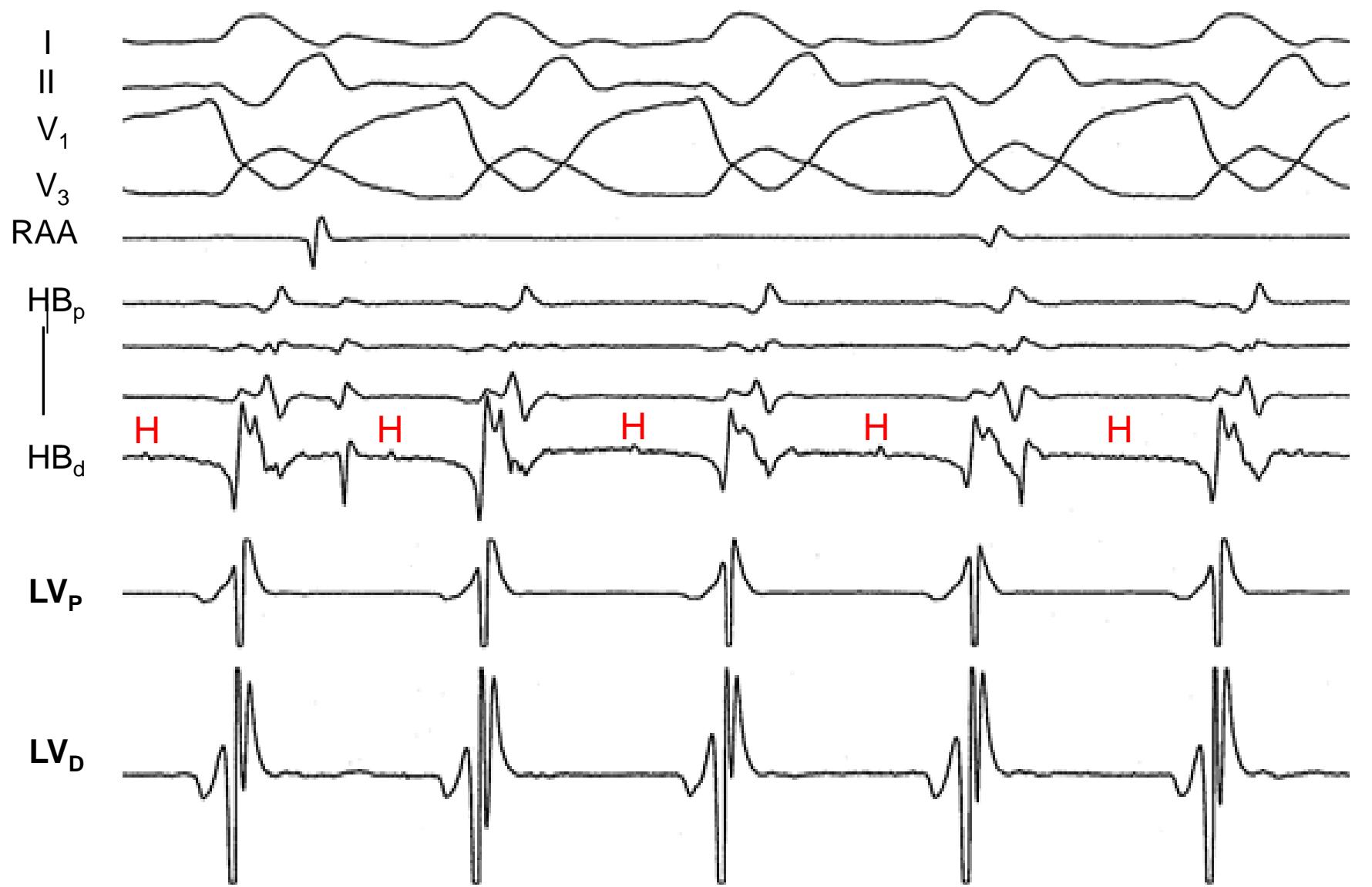


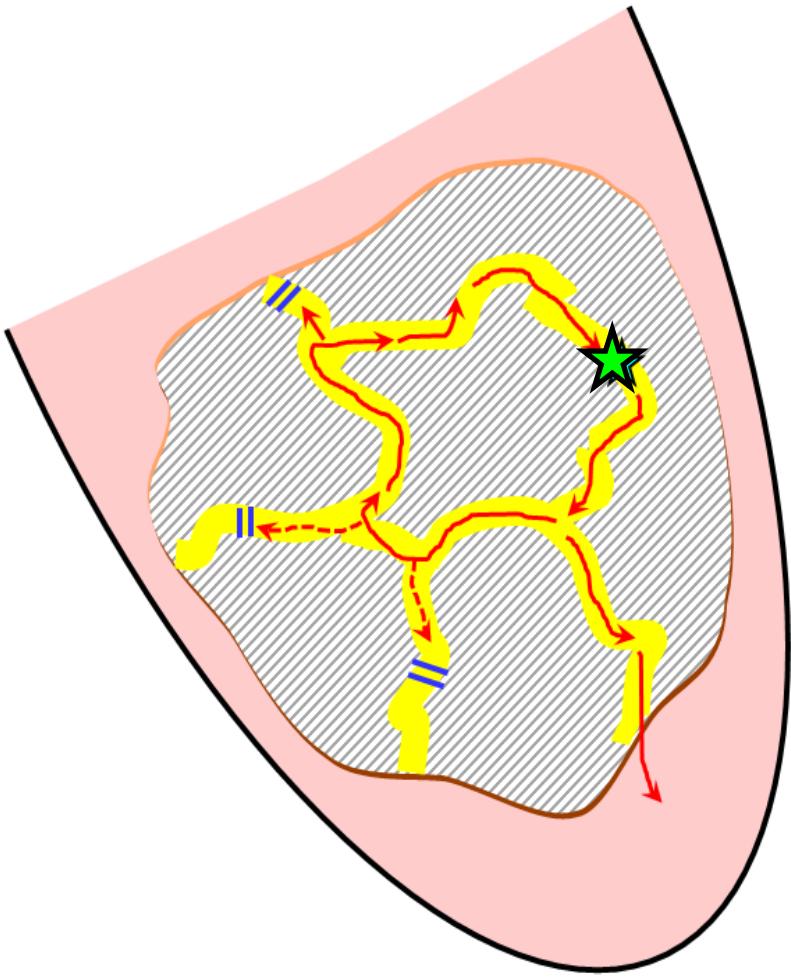
Figure 11.4A.



200 ms

Figure 11.4B.

VT



Pacing in Sinus Rhythm

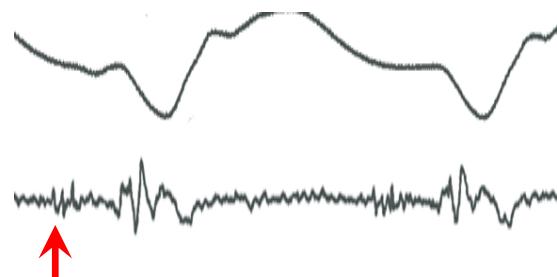
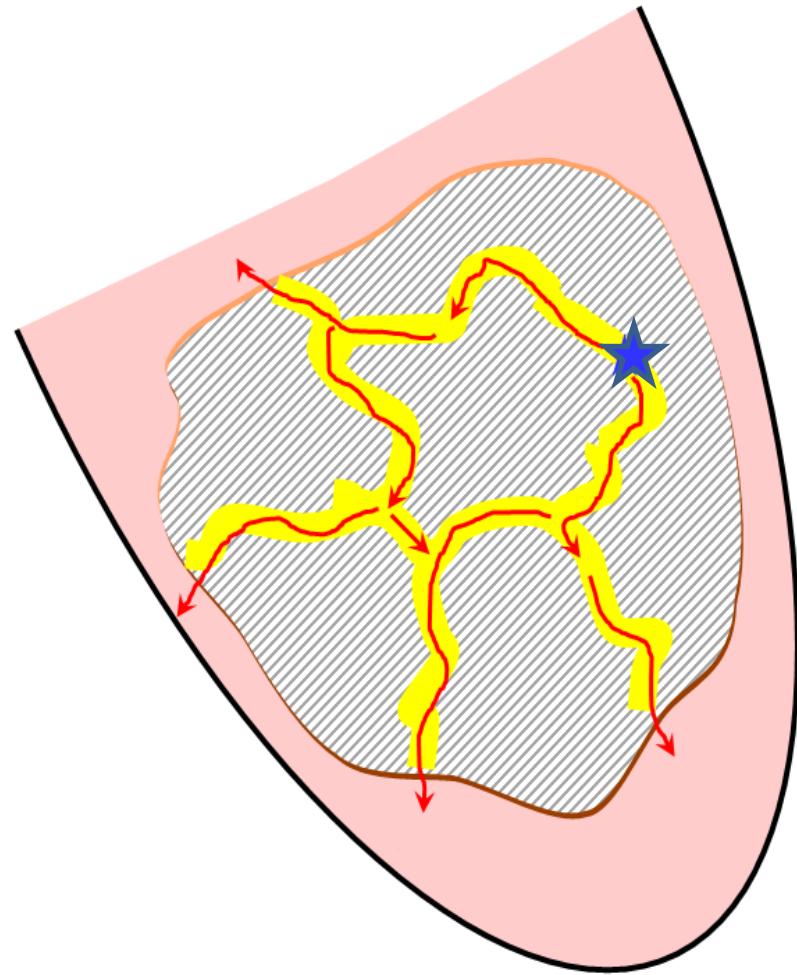


Figure 11.5A.

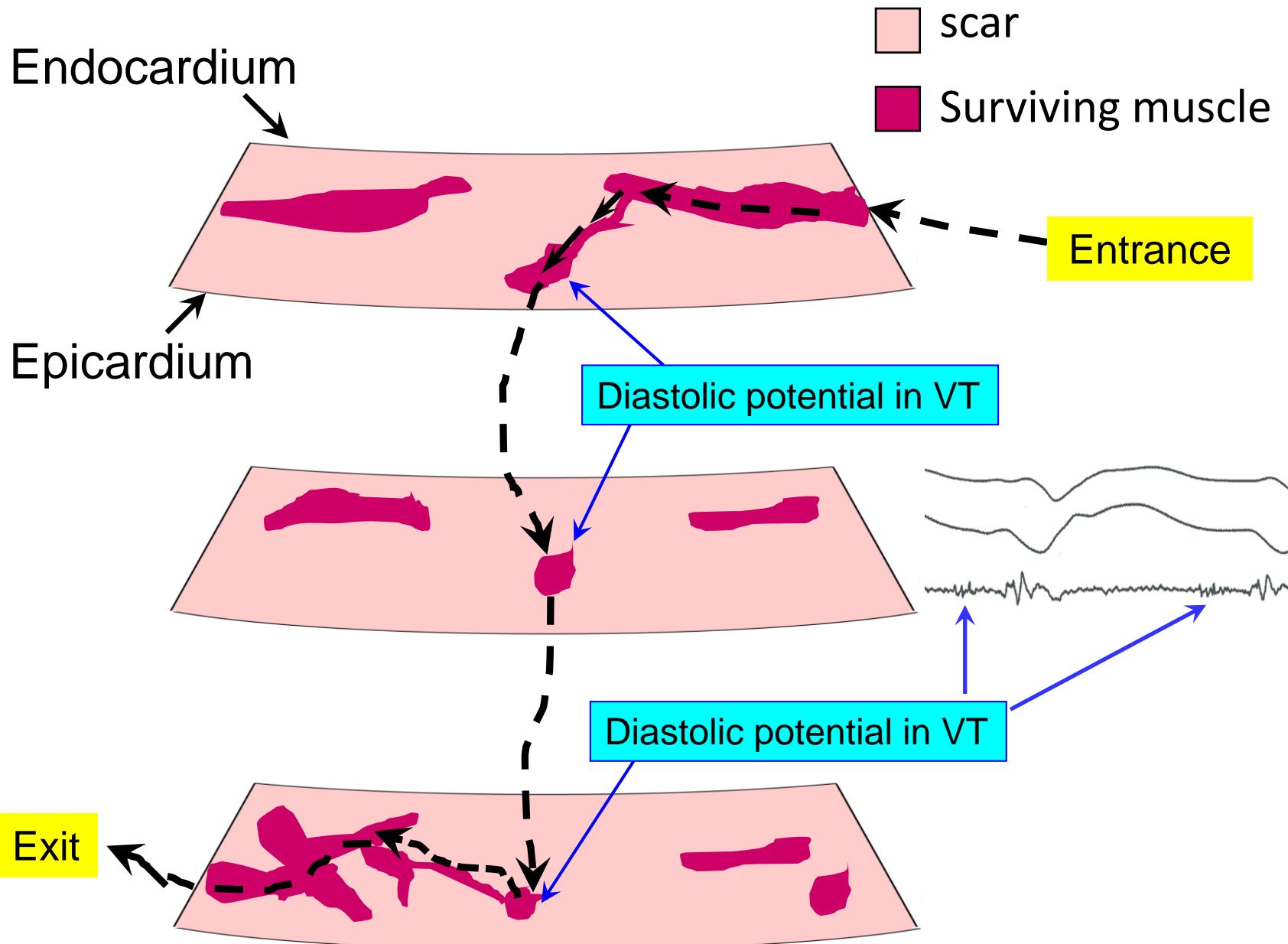


Figure 11.5B.

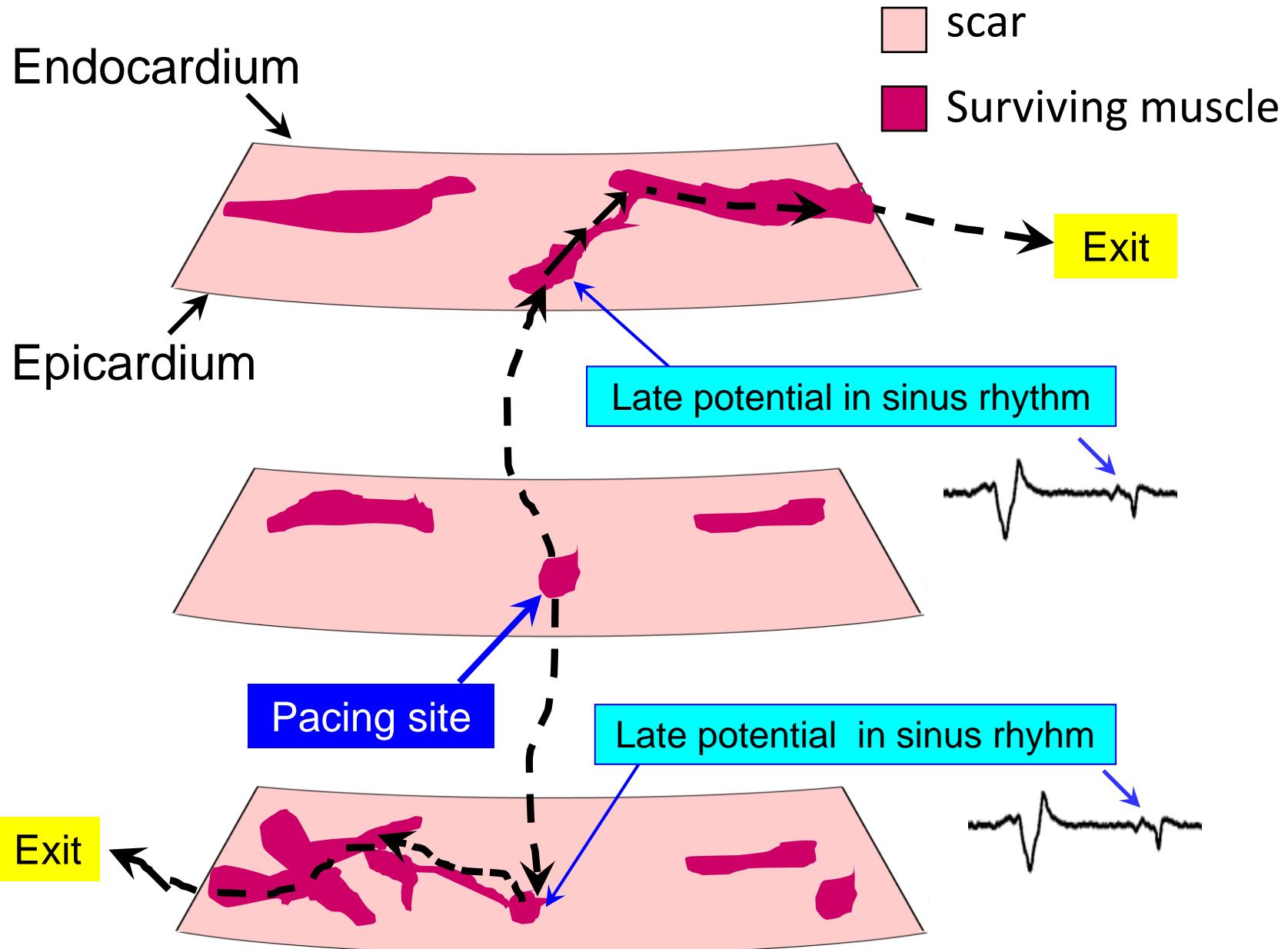


Figure 11.5C.

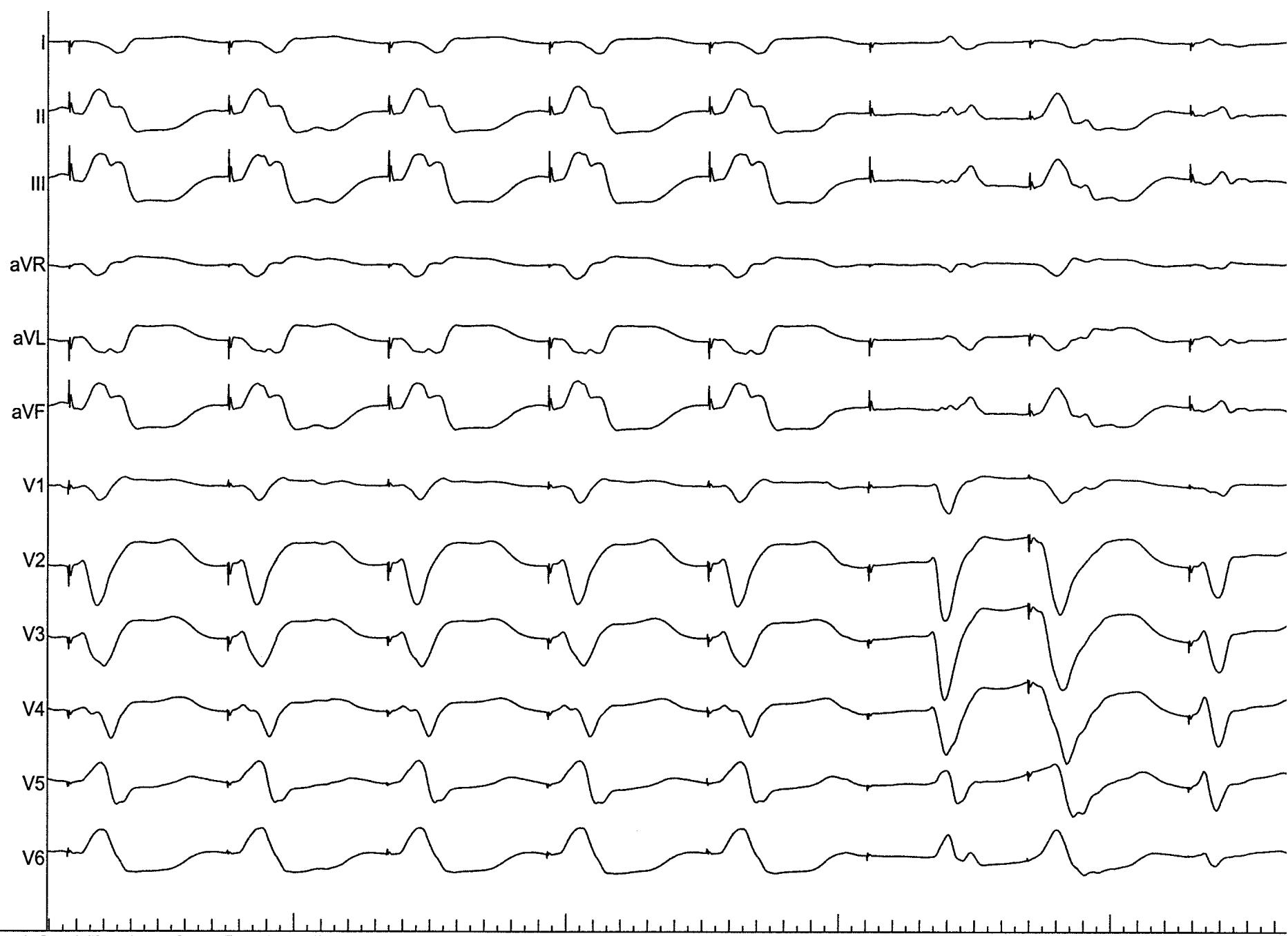
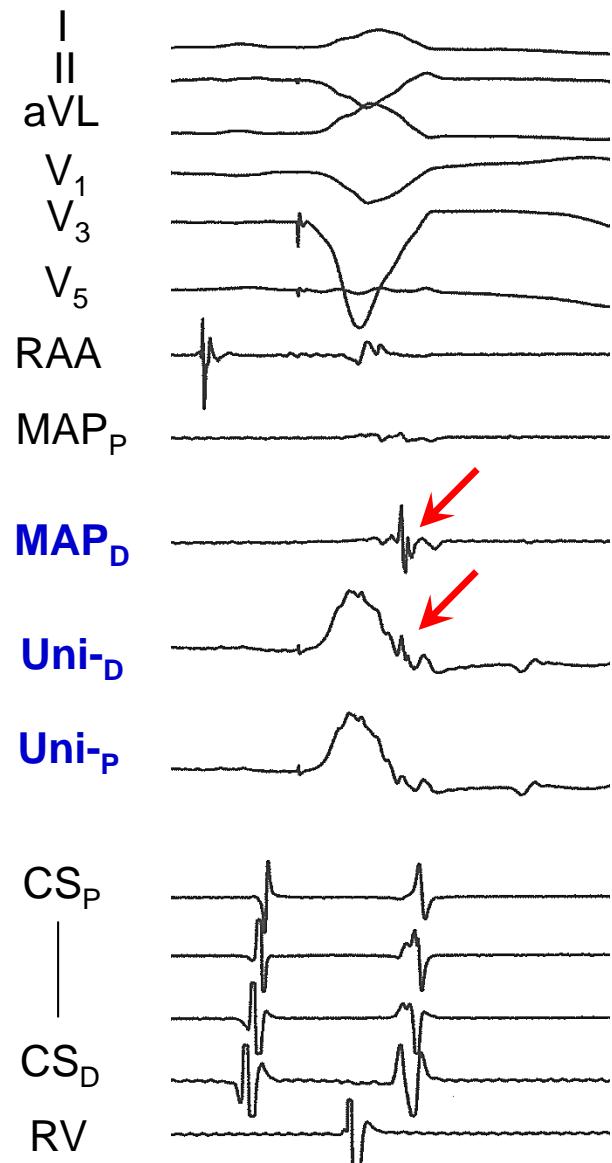
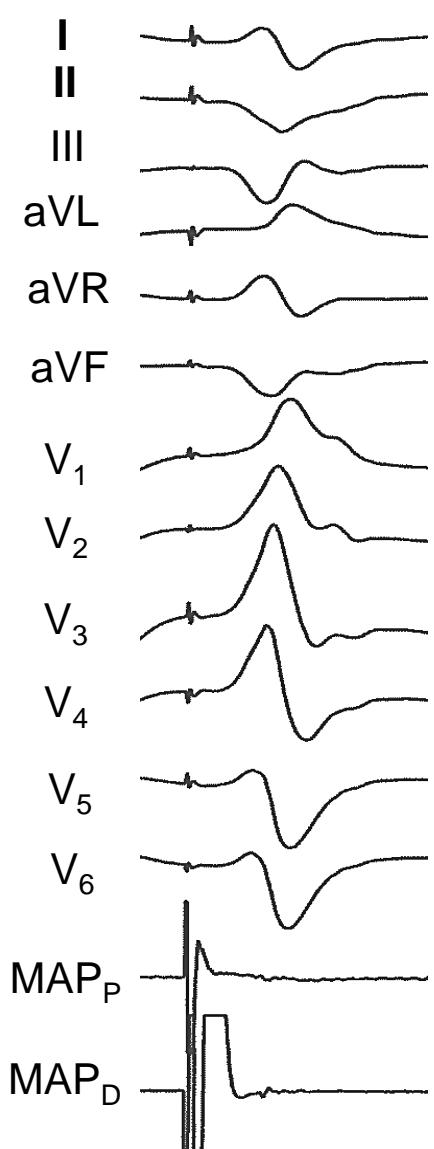


Figure 11.5D.

LAVA



Pacing



VT: inferior-apical exit

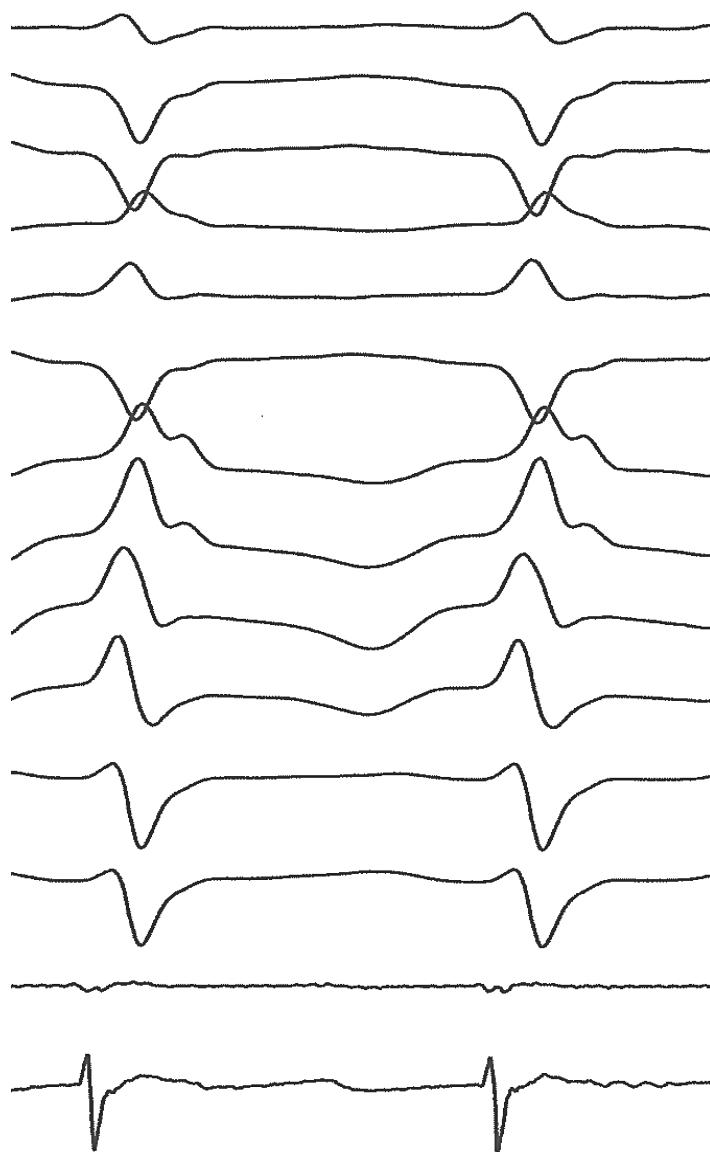


Figure 11.6A.

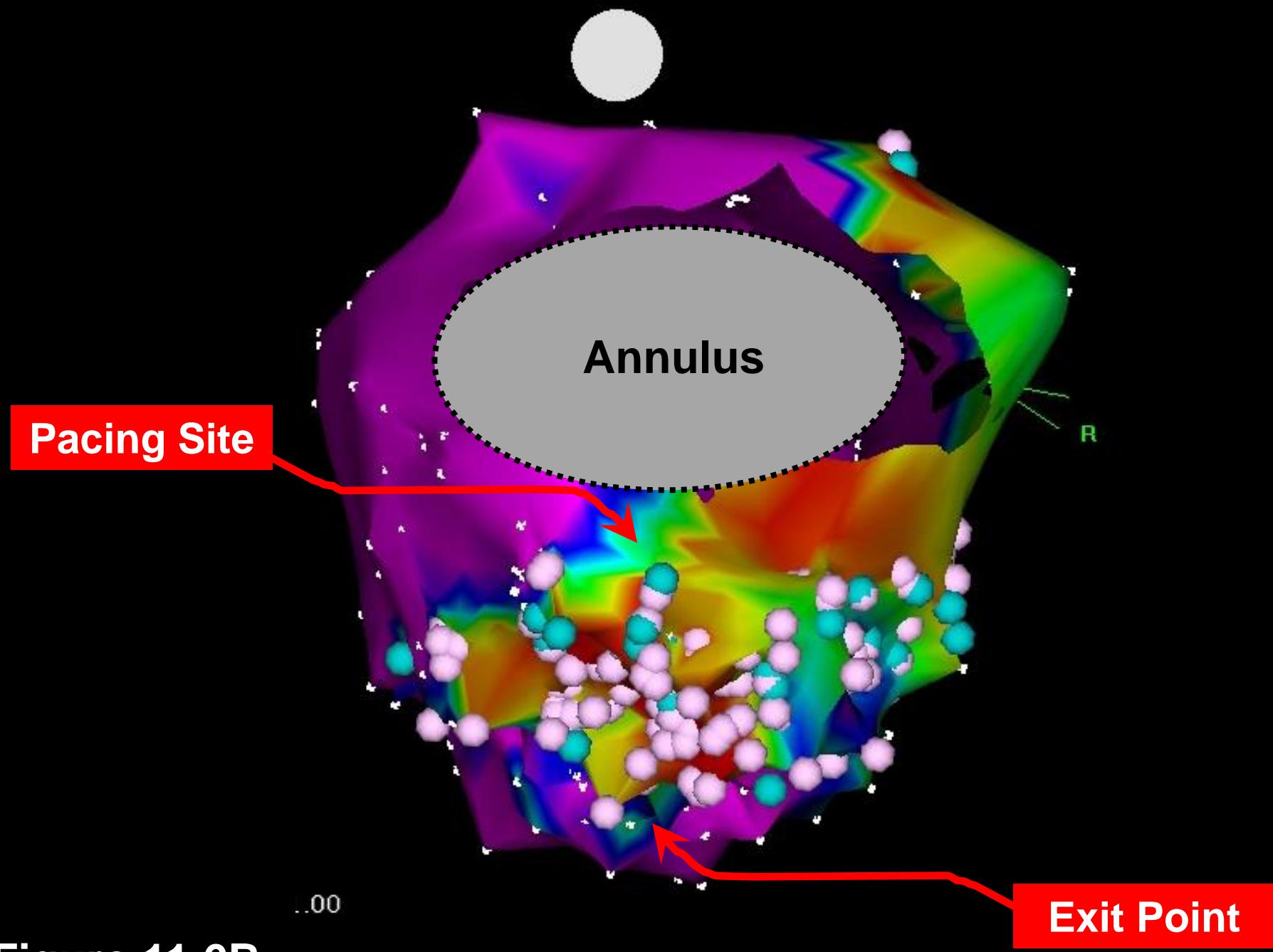


Figure 11.6B.

Referred by: Sunny Po

Unconfirmed

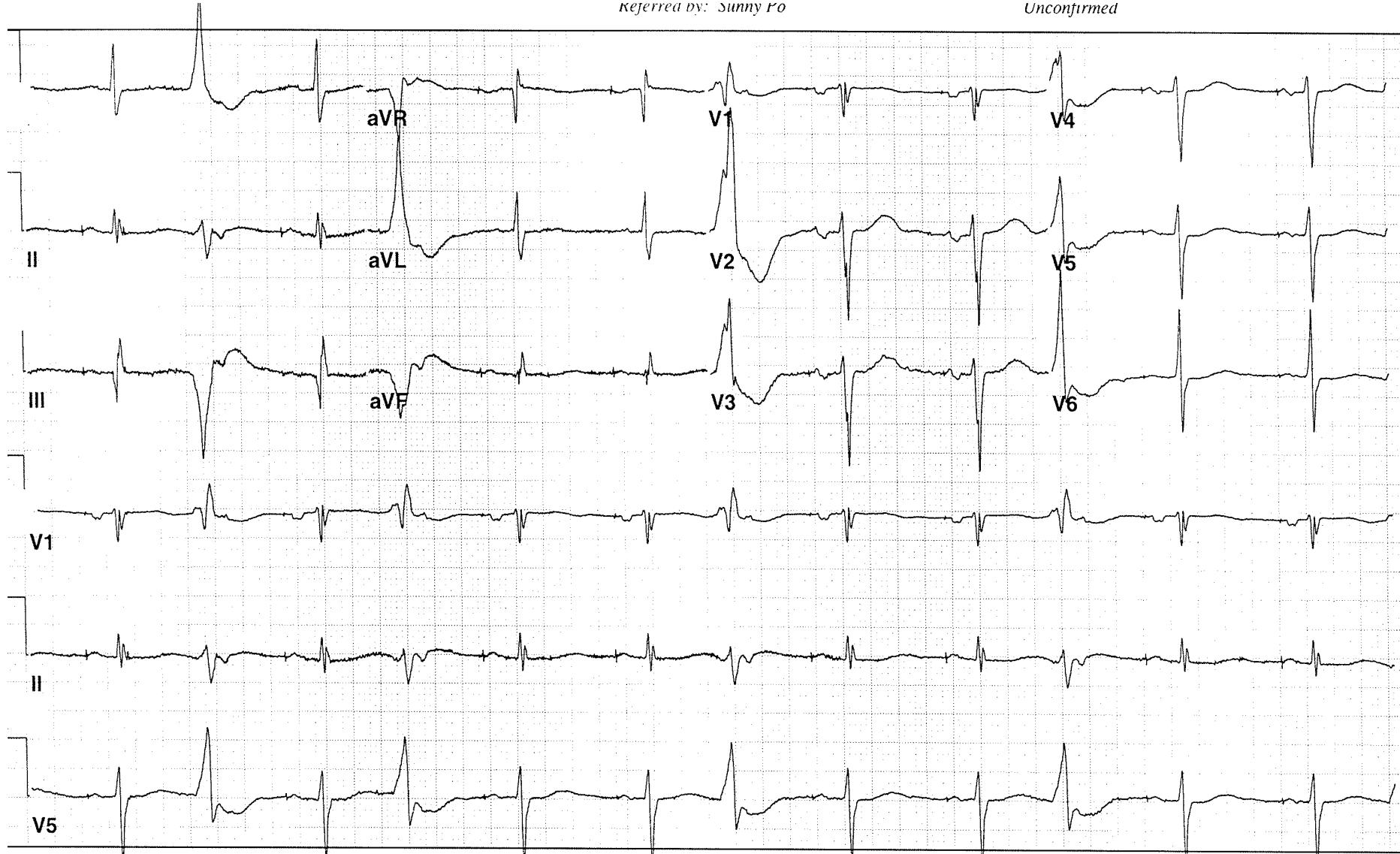
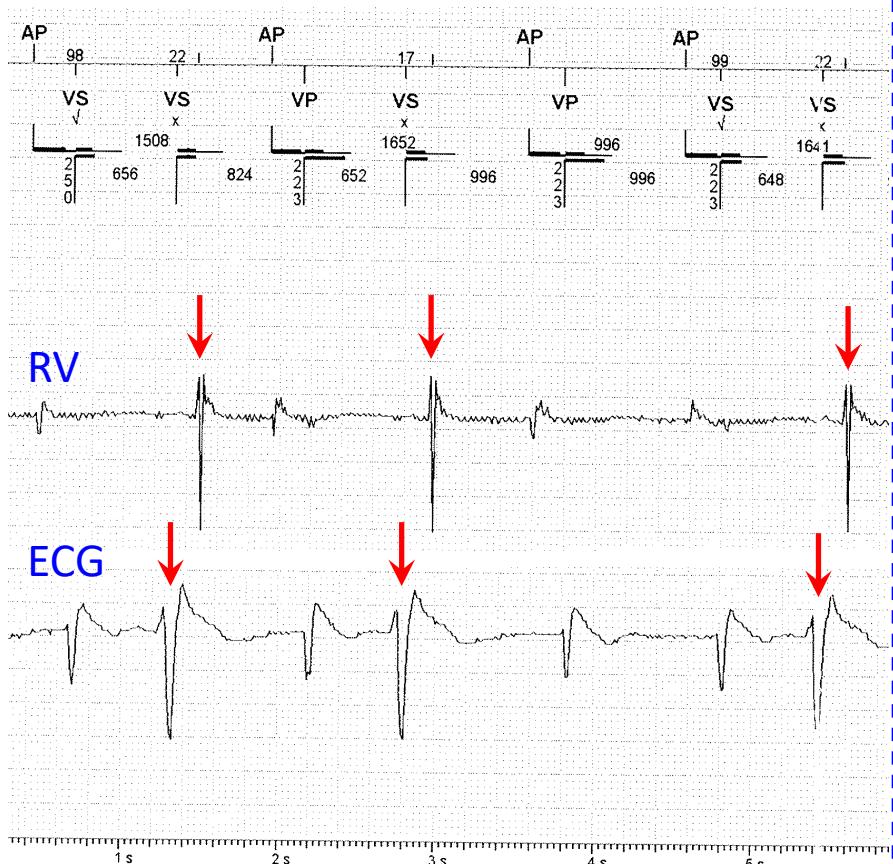


Figure 11.6C

Bigeminy in EP Lab



Clinical Nonsustained VT

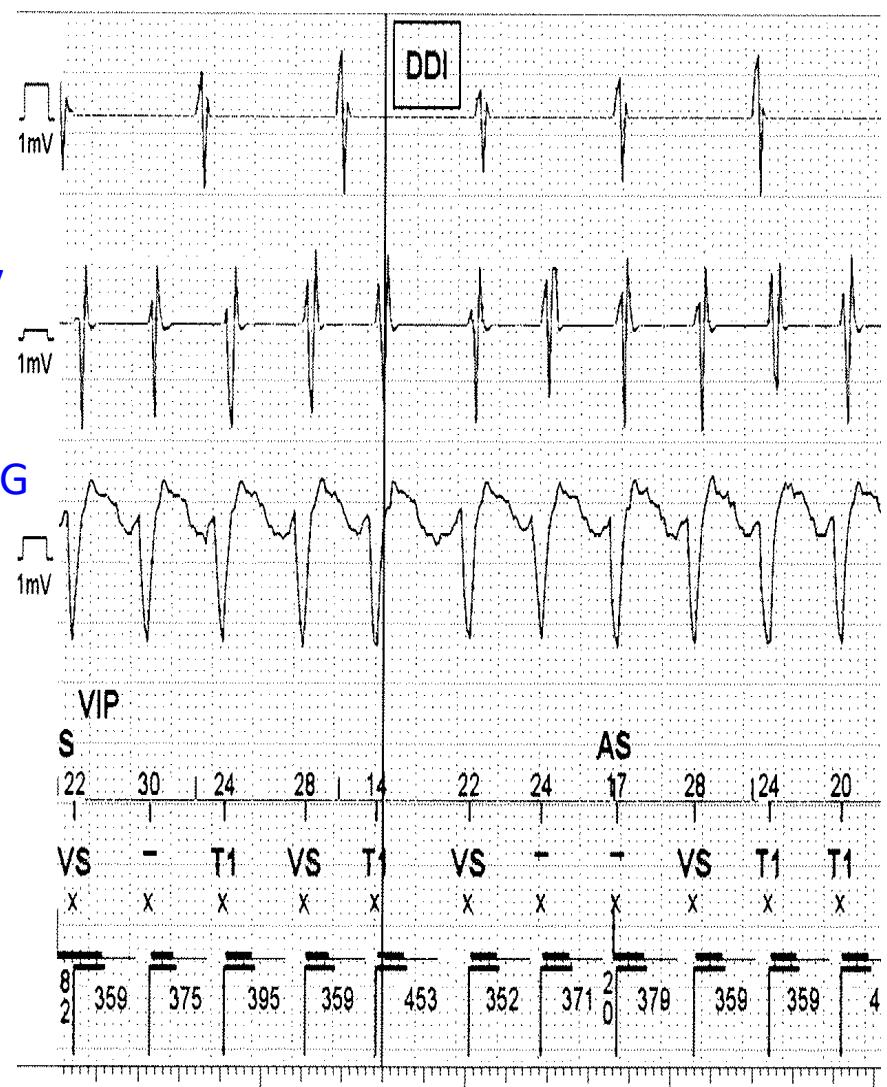


Figure 11.6D

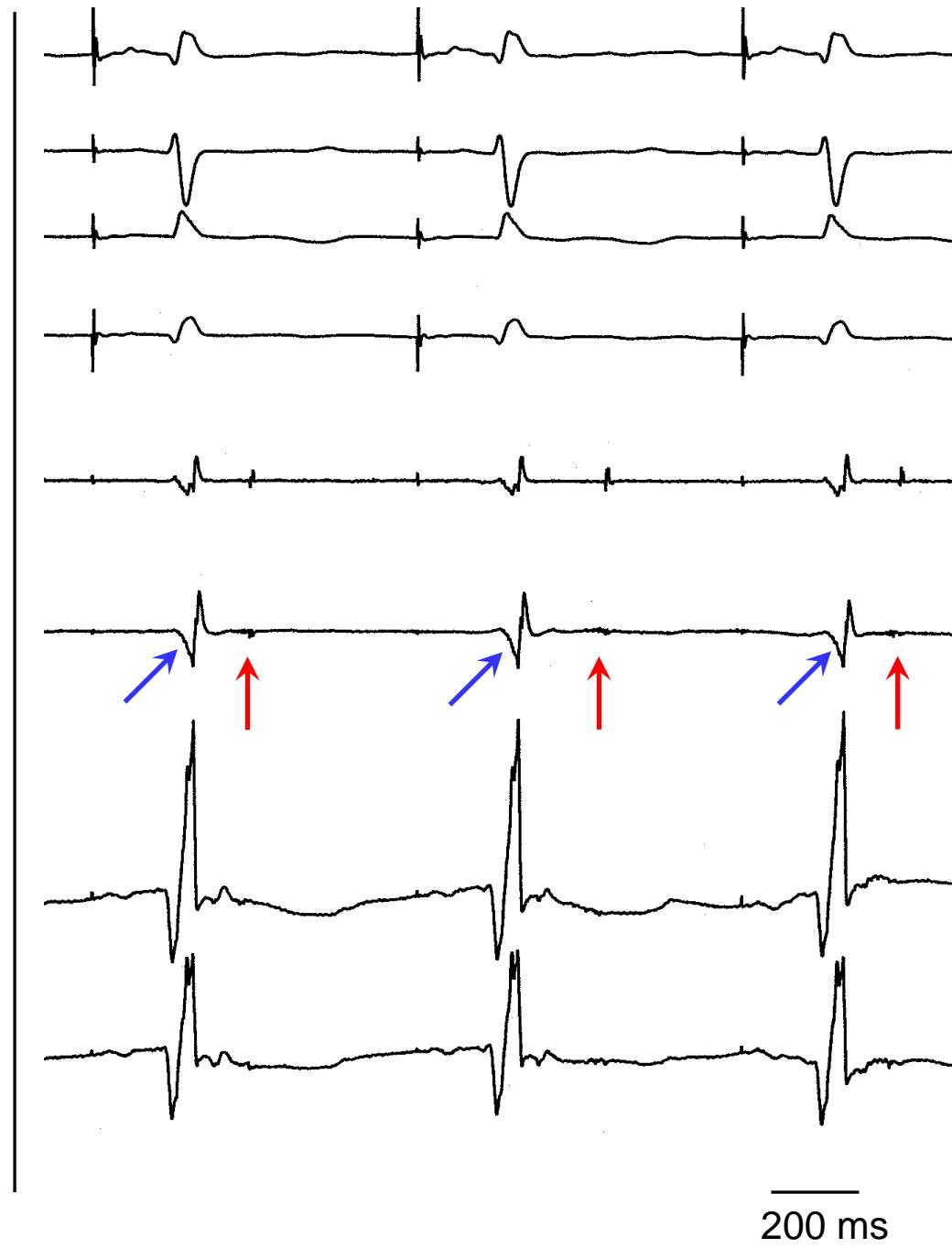
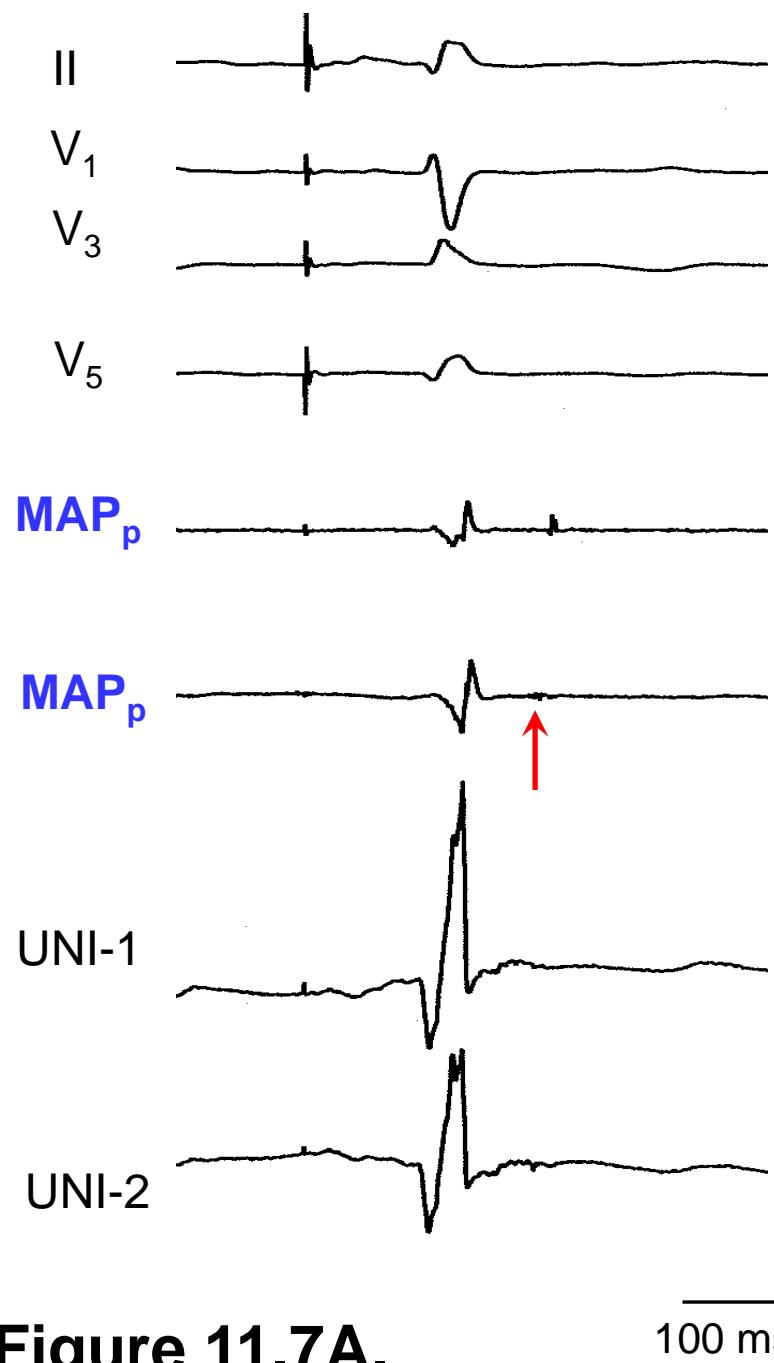


Figure 11.7A.

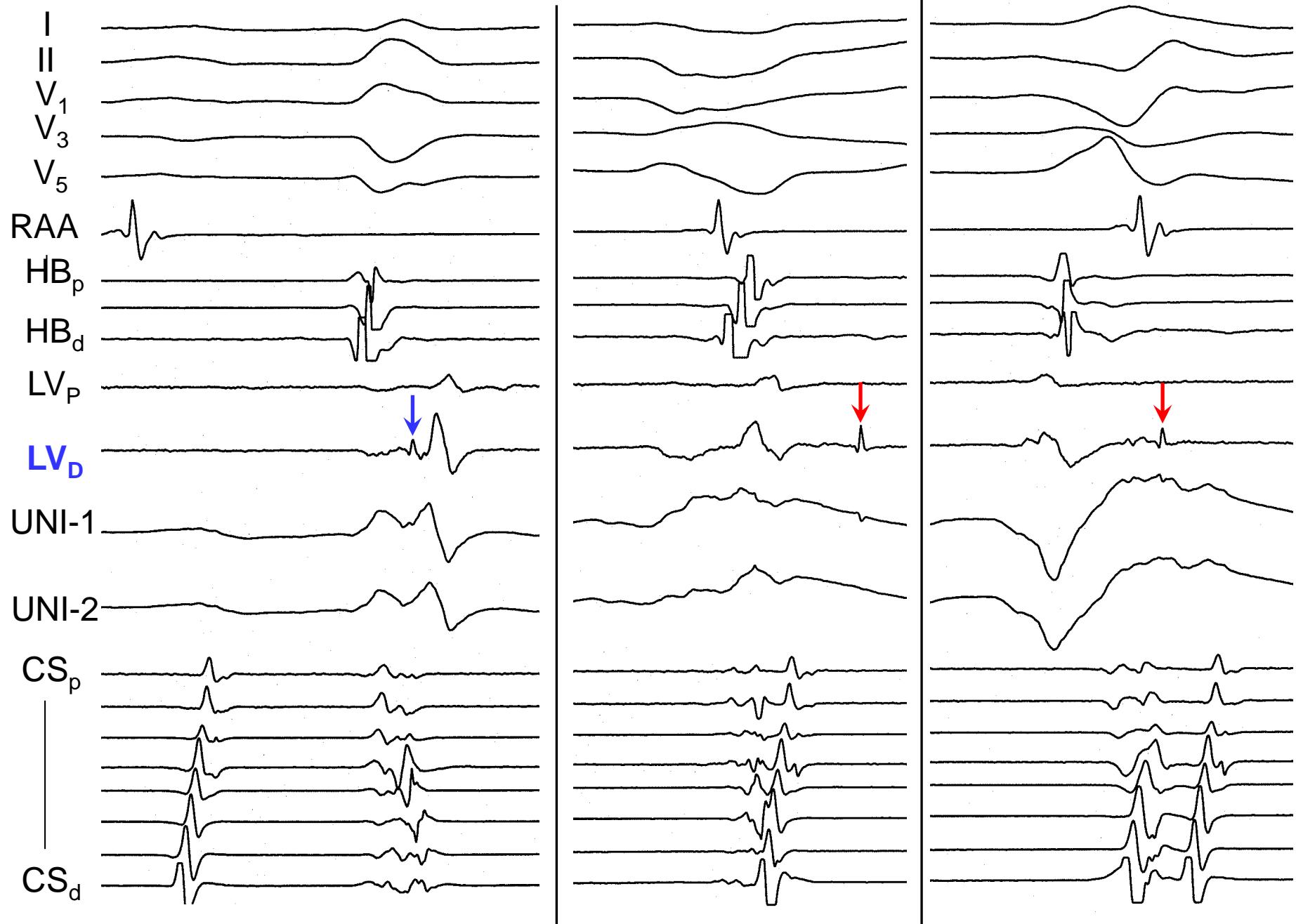


Figure 11.7B.

100 ms

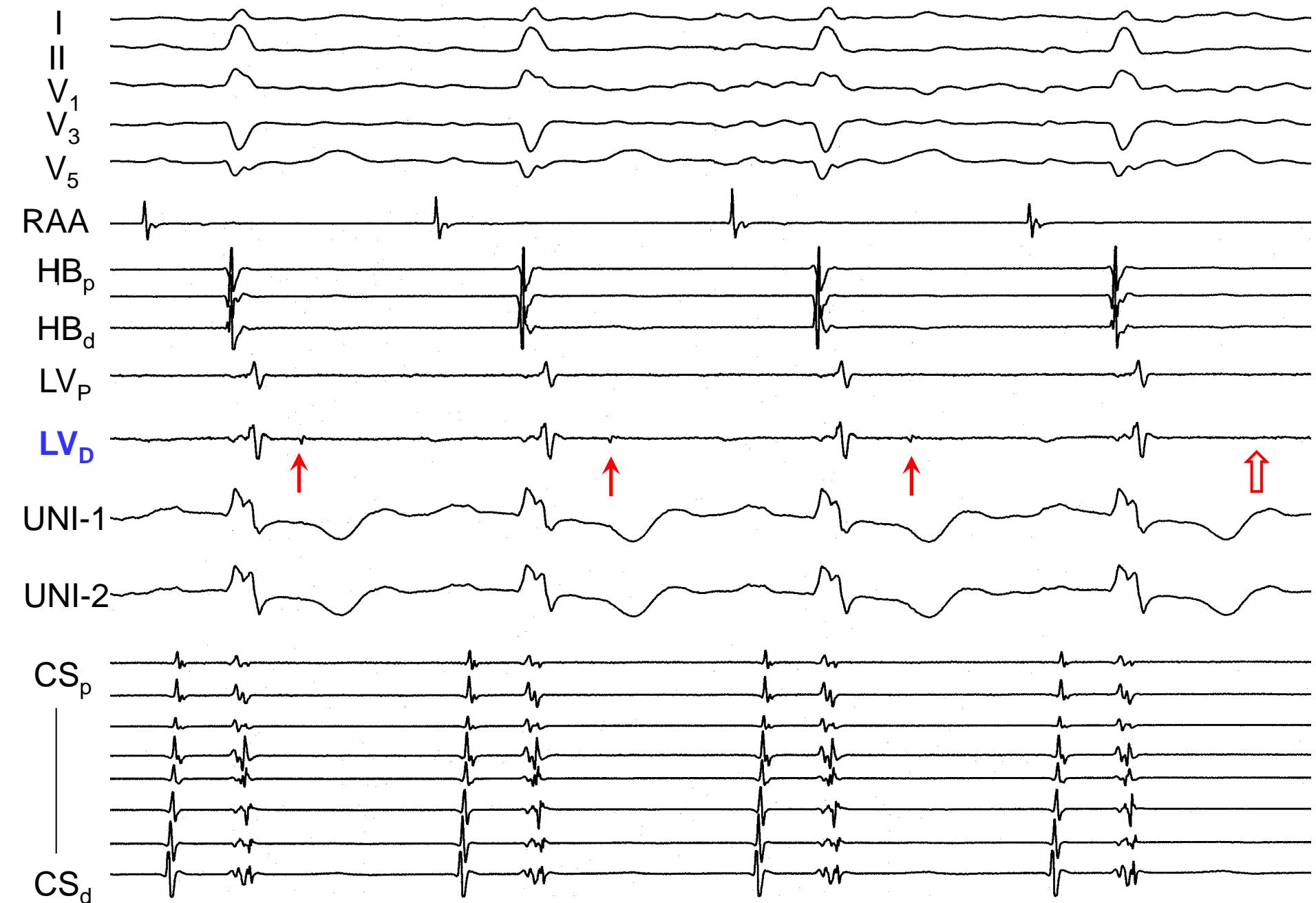


Figure 11.7C.

200 ms

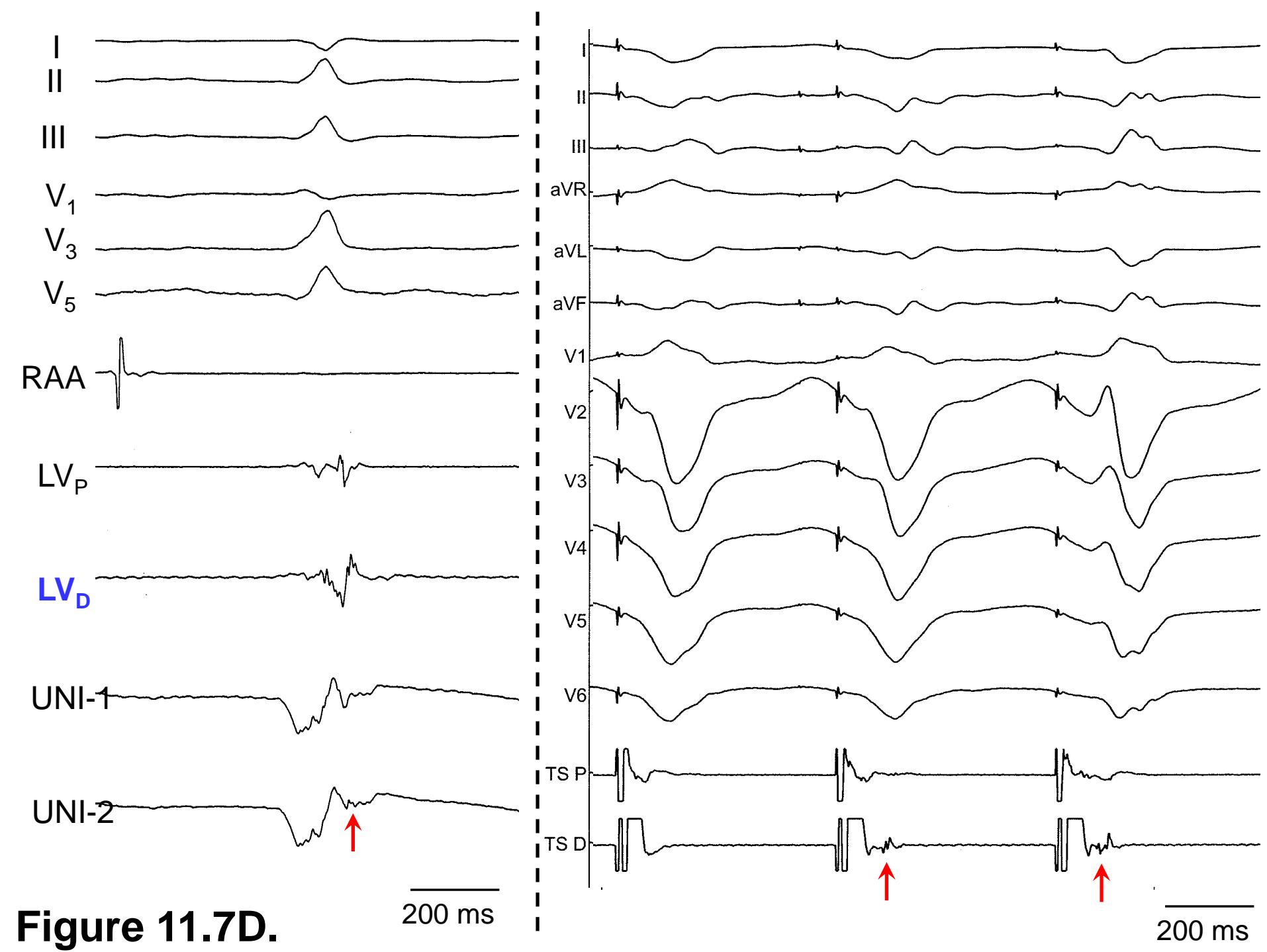


Figure 11.7D.

- Isthmus
- Inner Loop
- Blind Alley

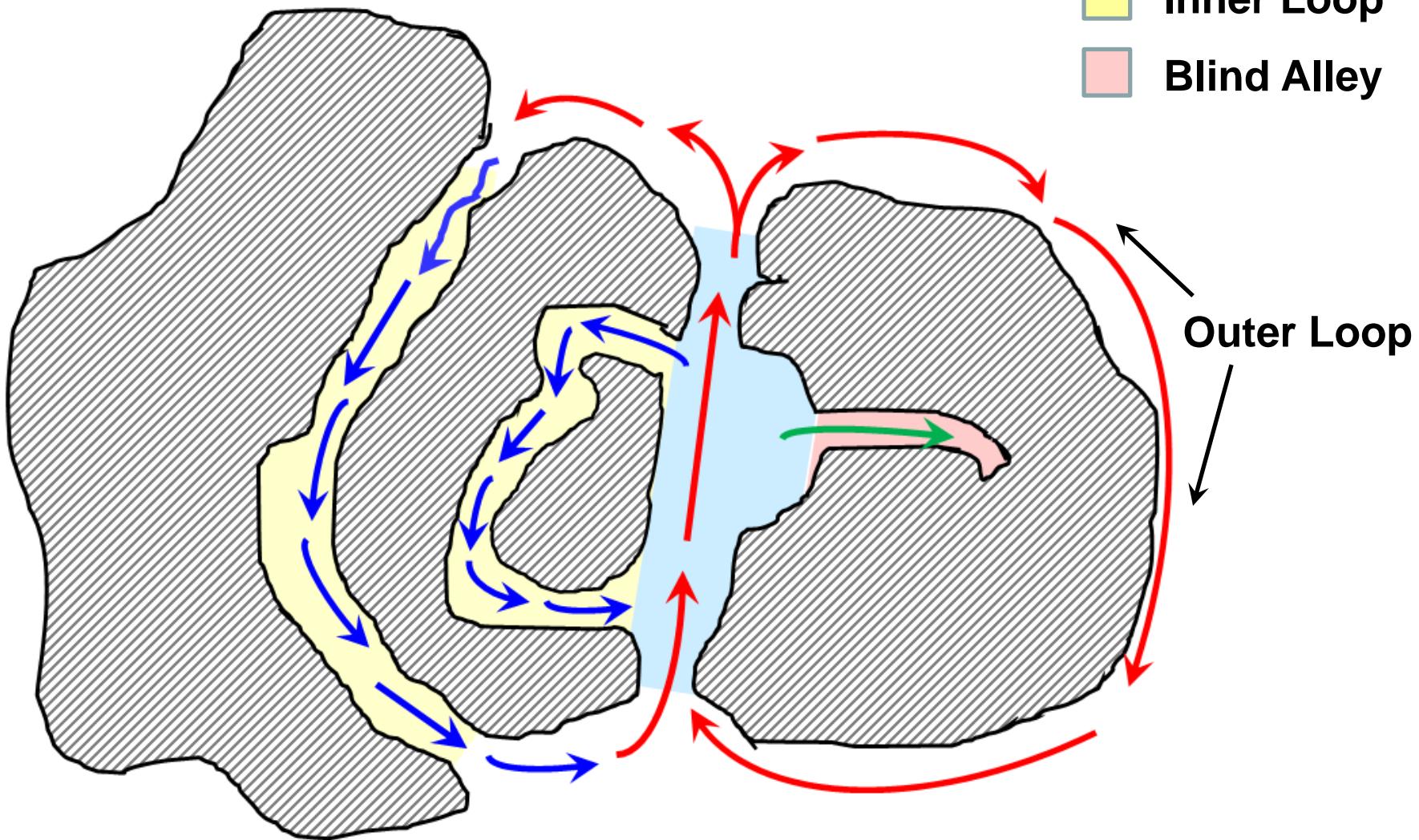


Figure 11.8A.

- Same QRS as VT
- Maybe similar QRS to VT
- Different QRS from VT
- ★ Pacing Site

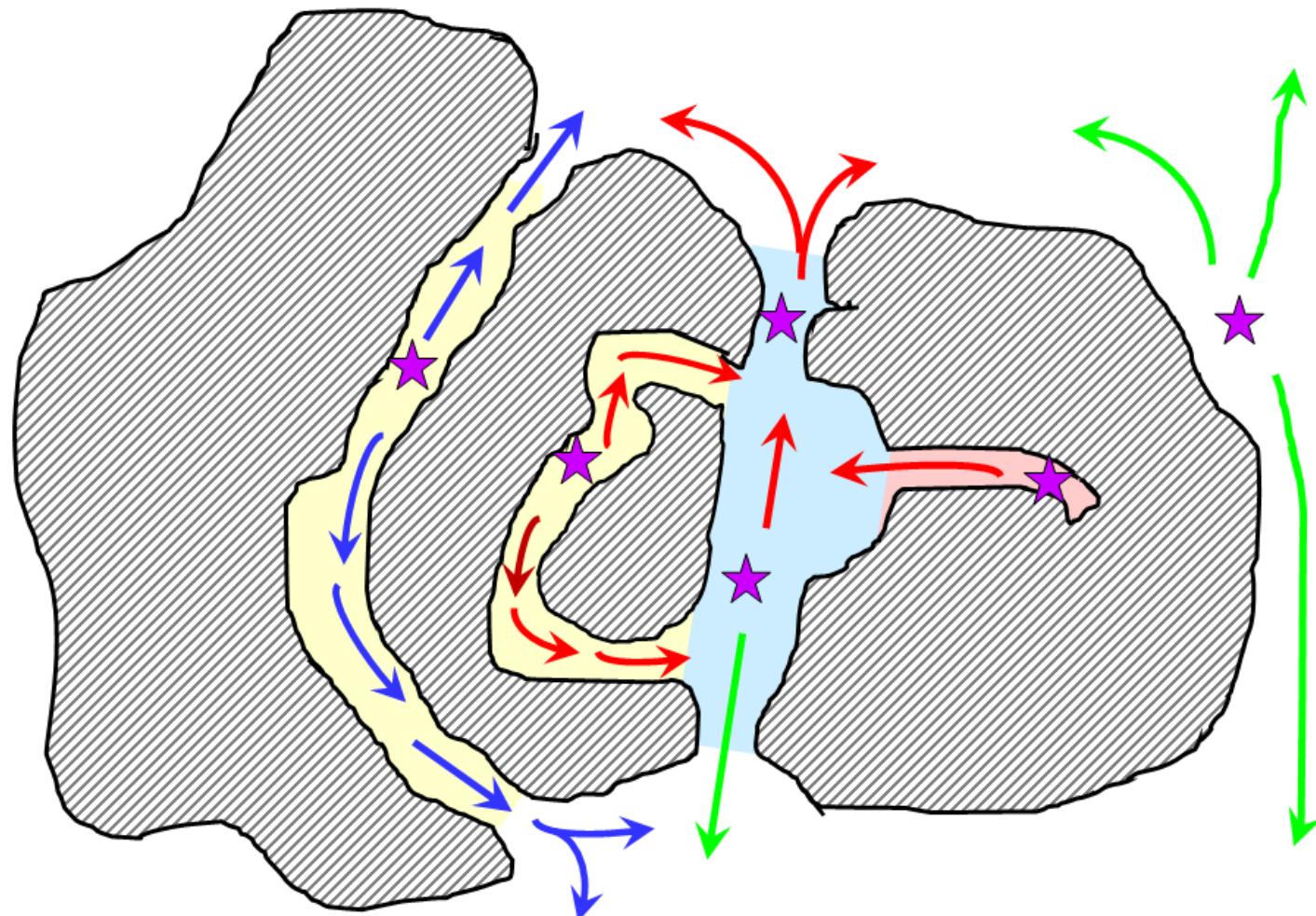


Figure 11.8B.

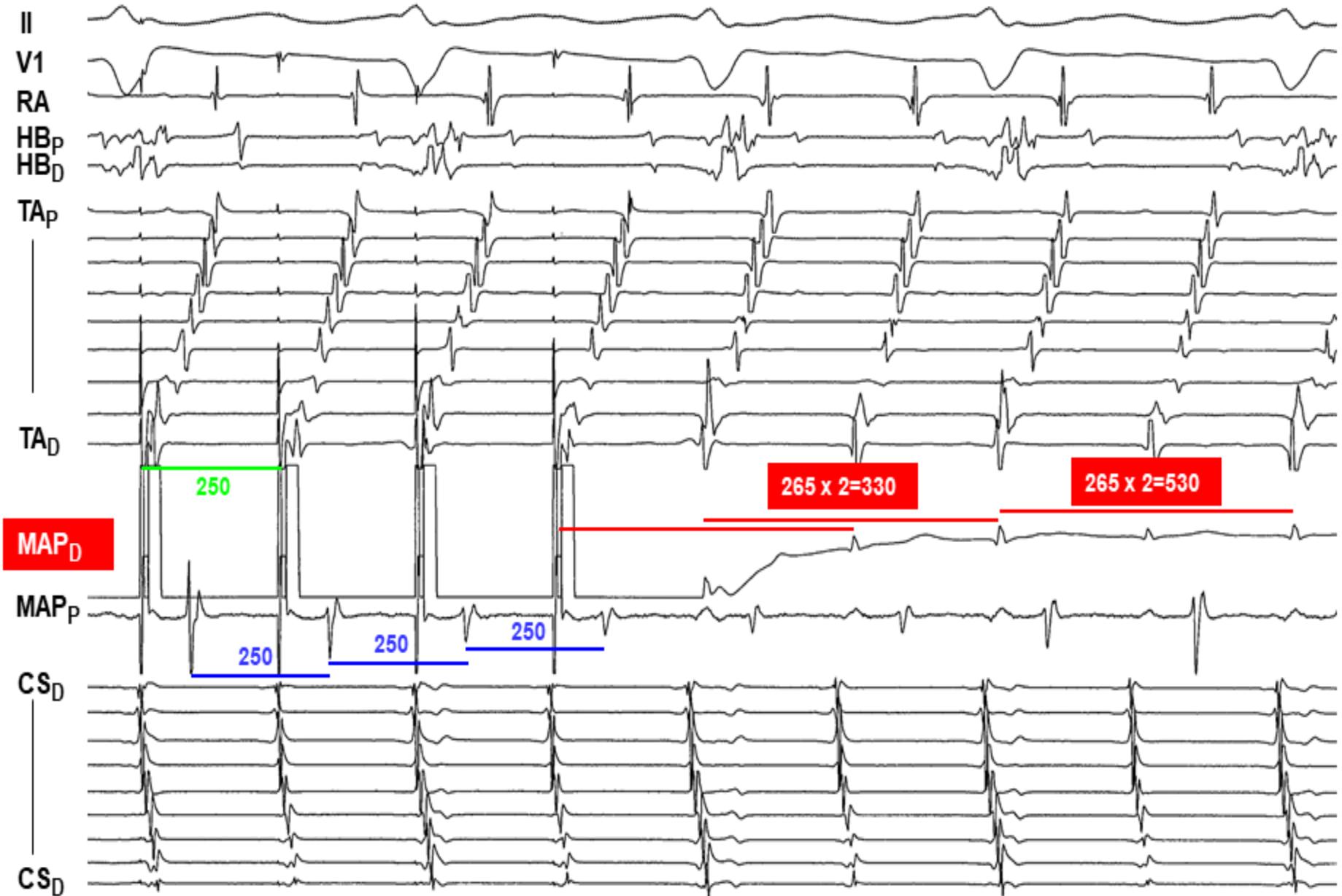


Figure 11.9A.

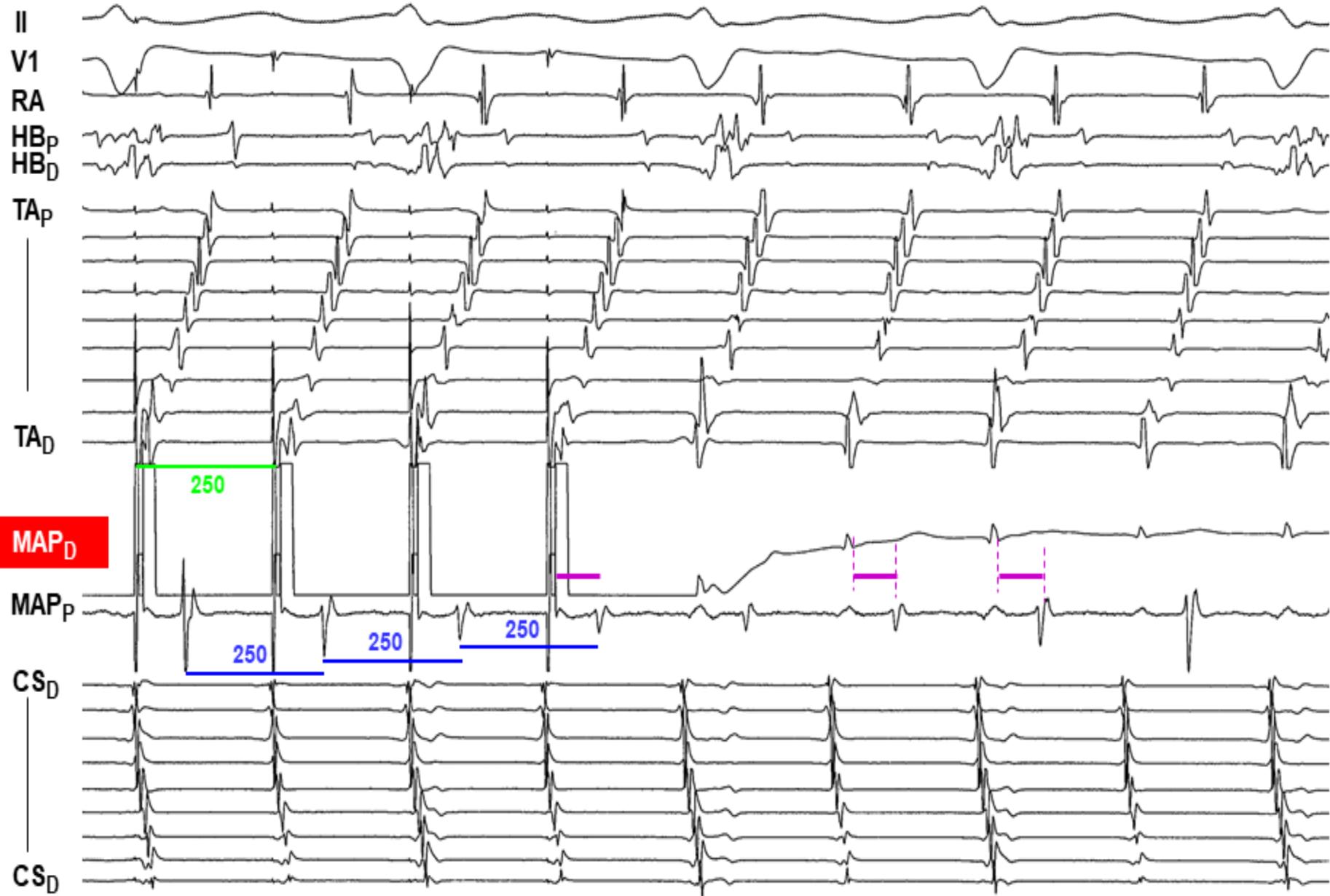
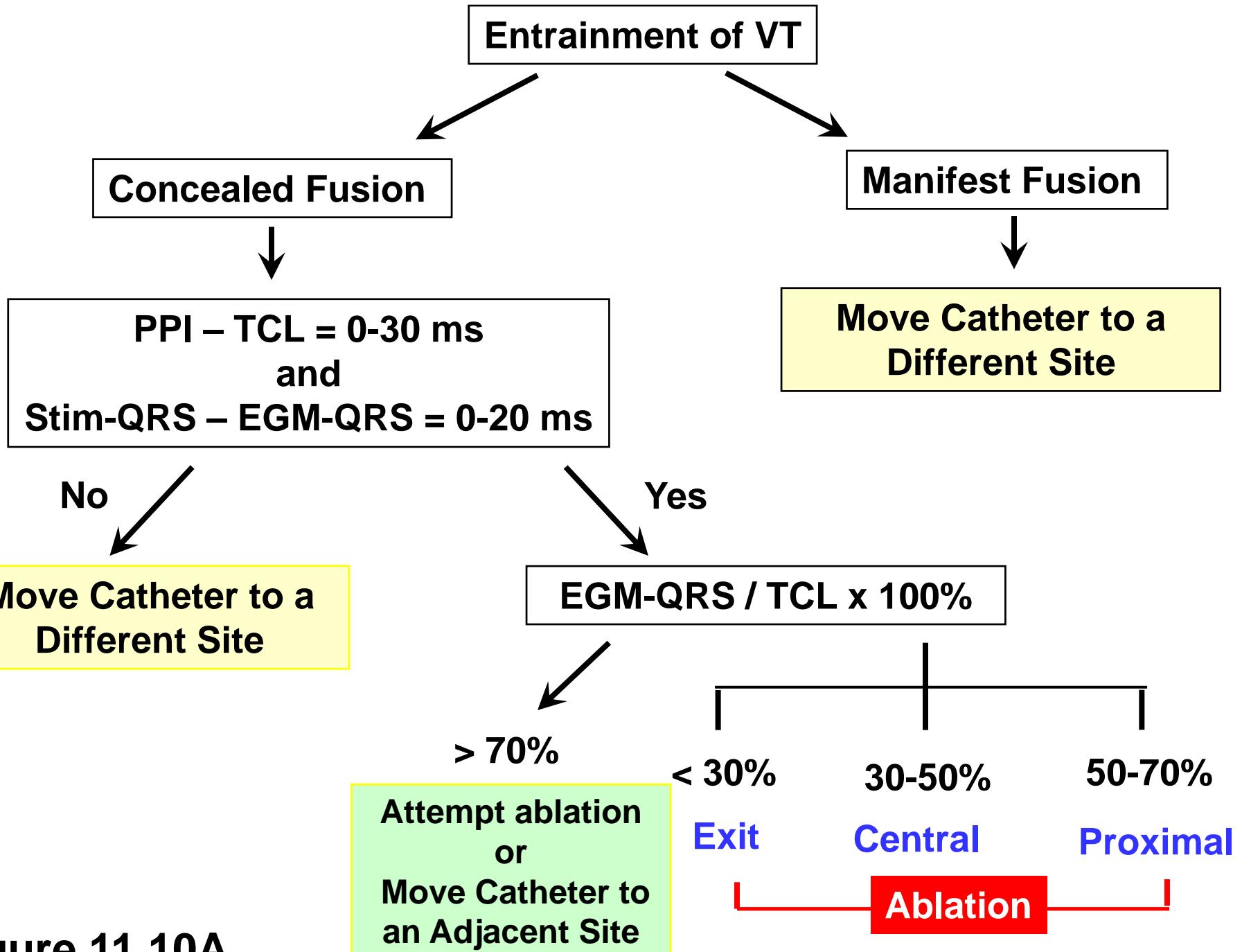


Figure 11.9B.



VT CL=510 ms

Pacing CL= 470 ms

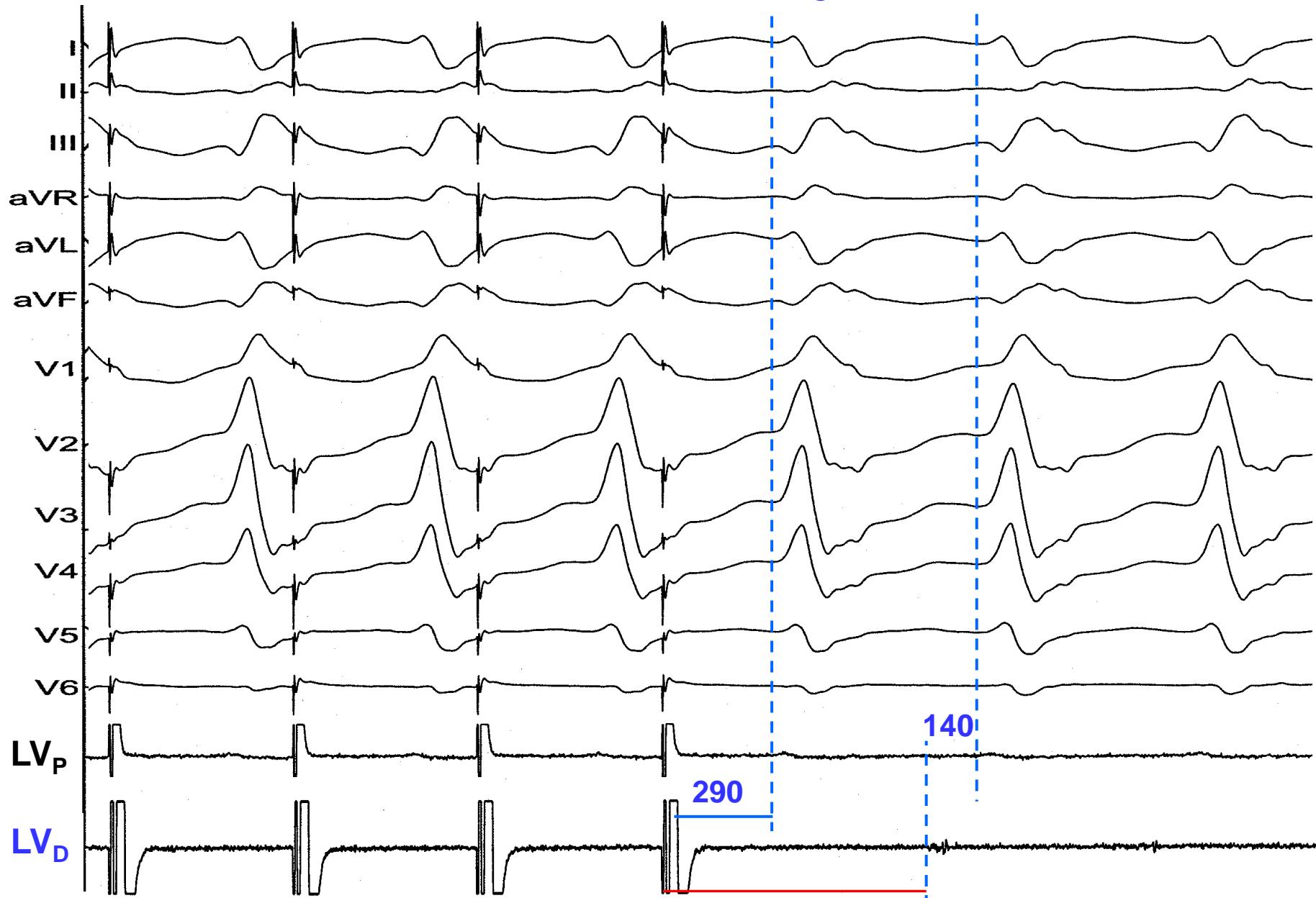


Figure 11.10B.

PPI = 585 ms

200 ms

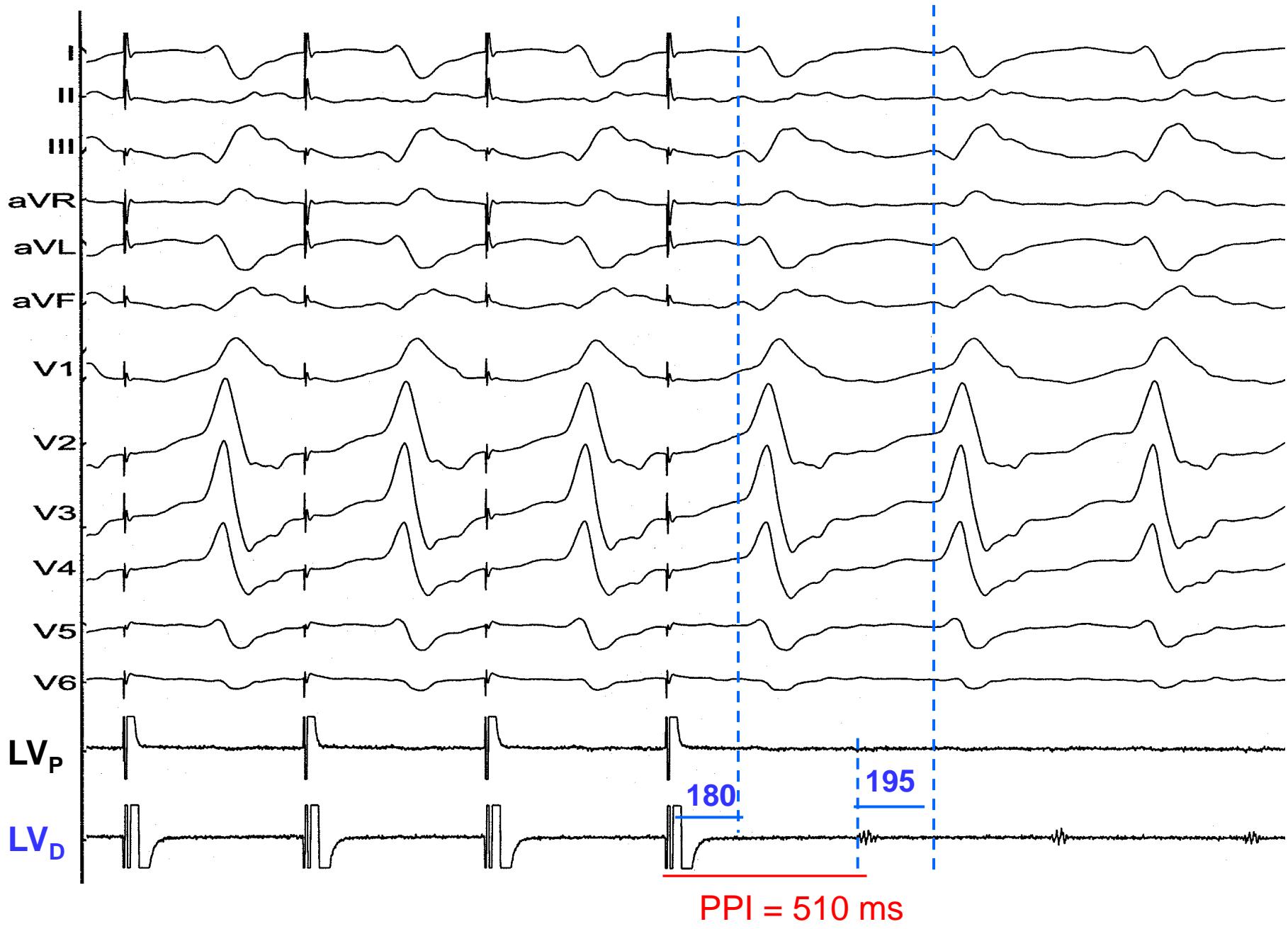


Figure 11.10C.

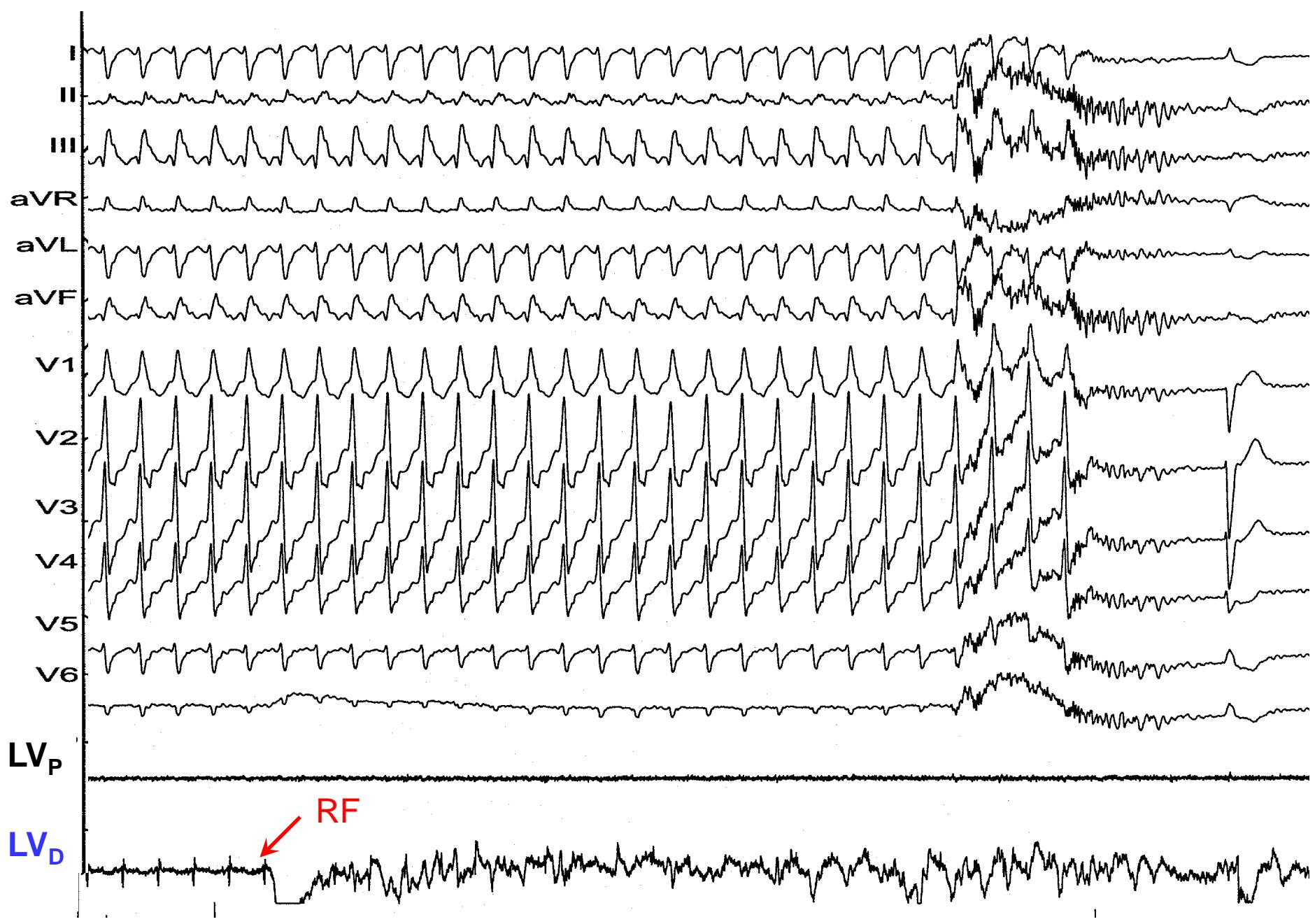


Figure 11.10D.

VT CL=430 ms

Pacing CL= 400 ms

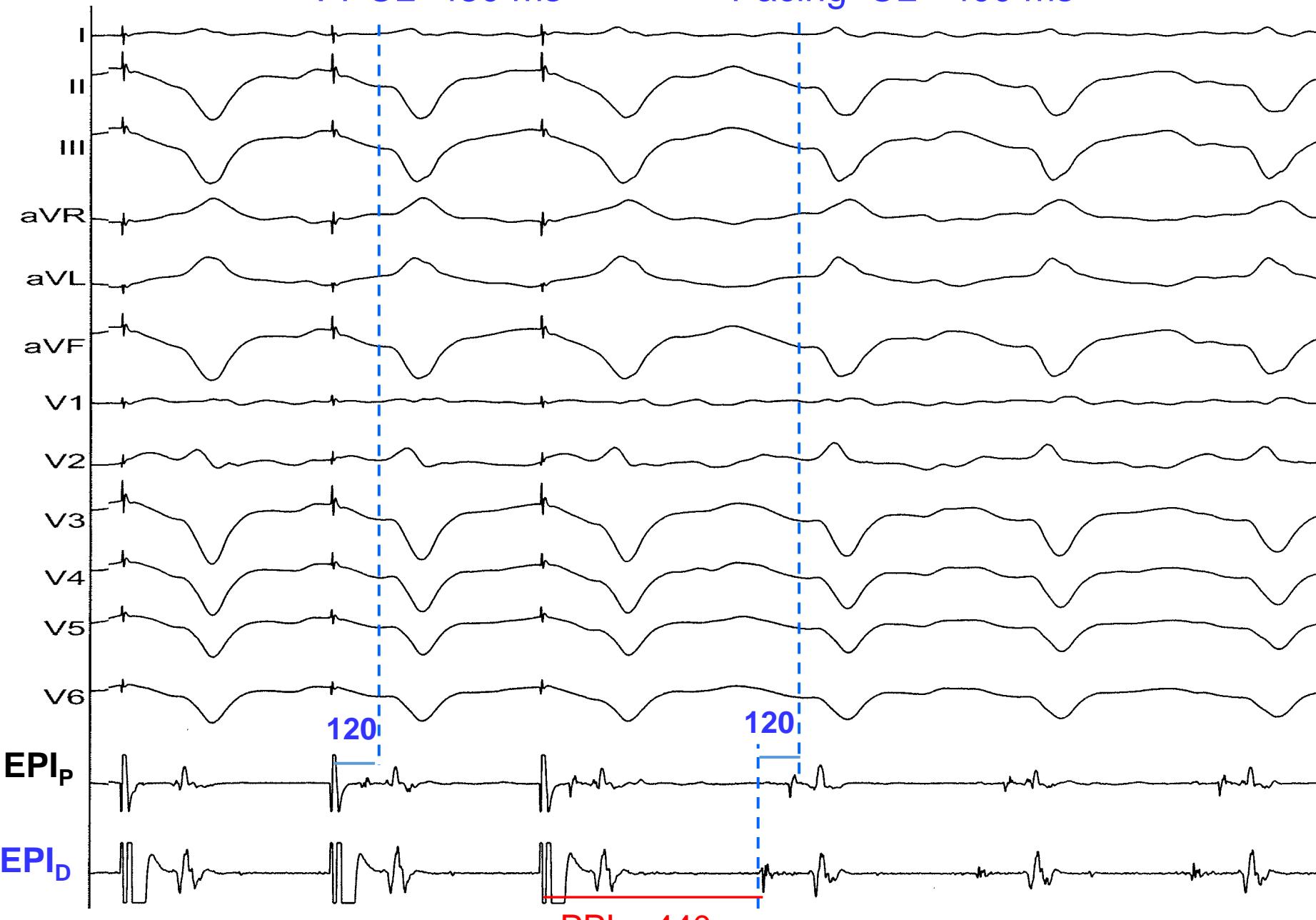


Figure 11.11A.

PPI = 440 ms

200 ms

VT CL=430 ms

Pacing CL= 400 ms

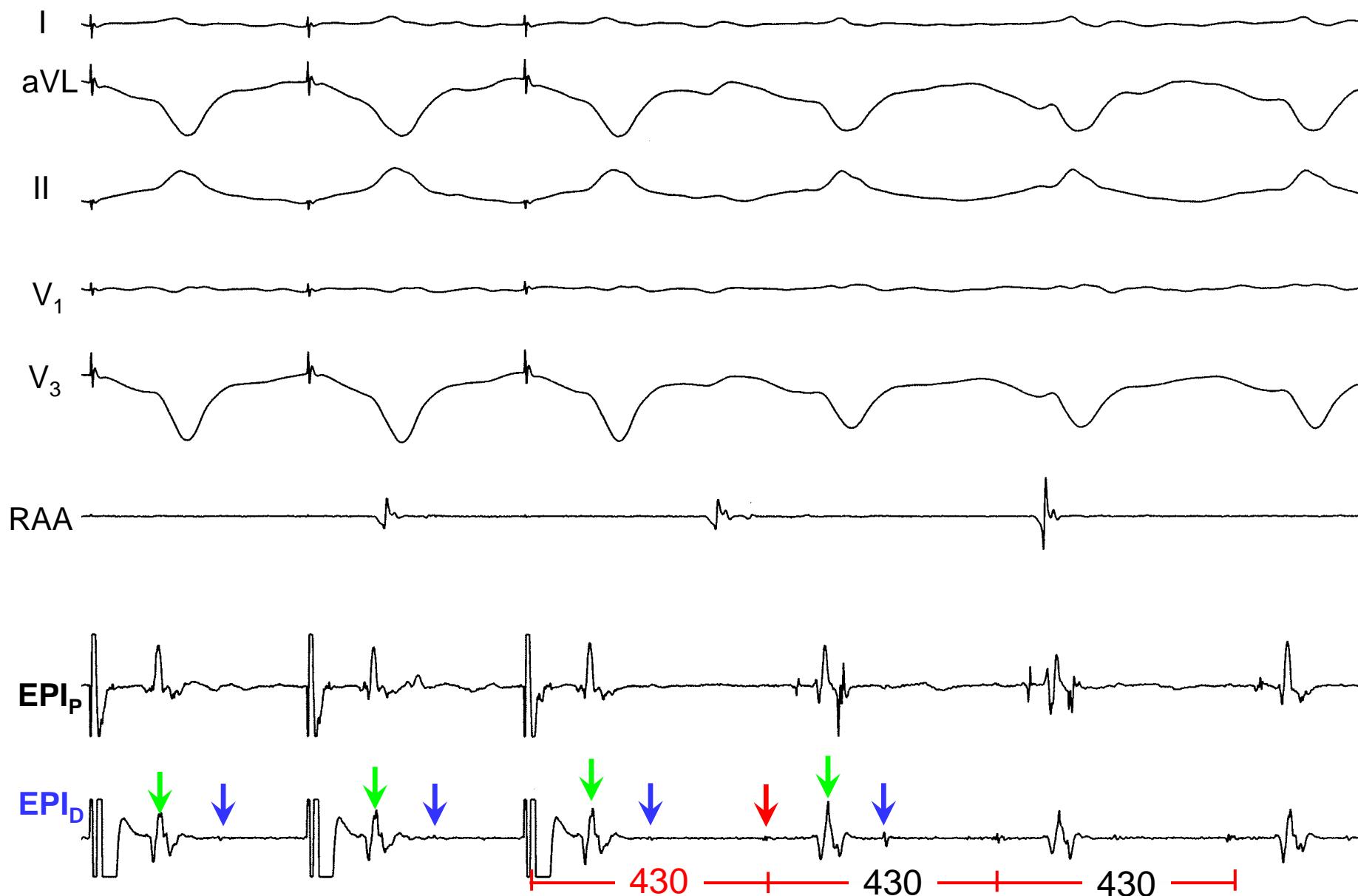


Figure 11.11B.

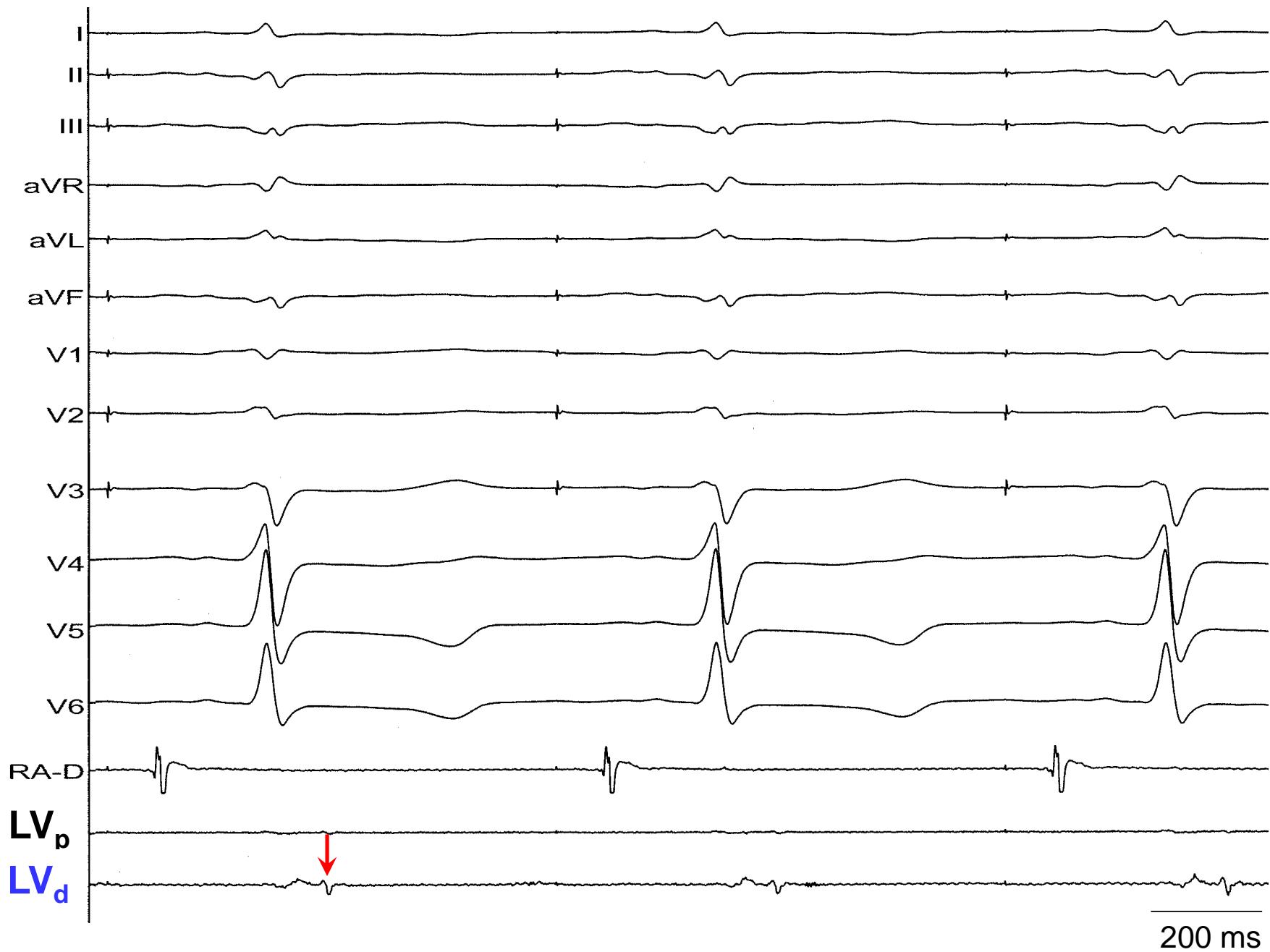


Figure 11.12A

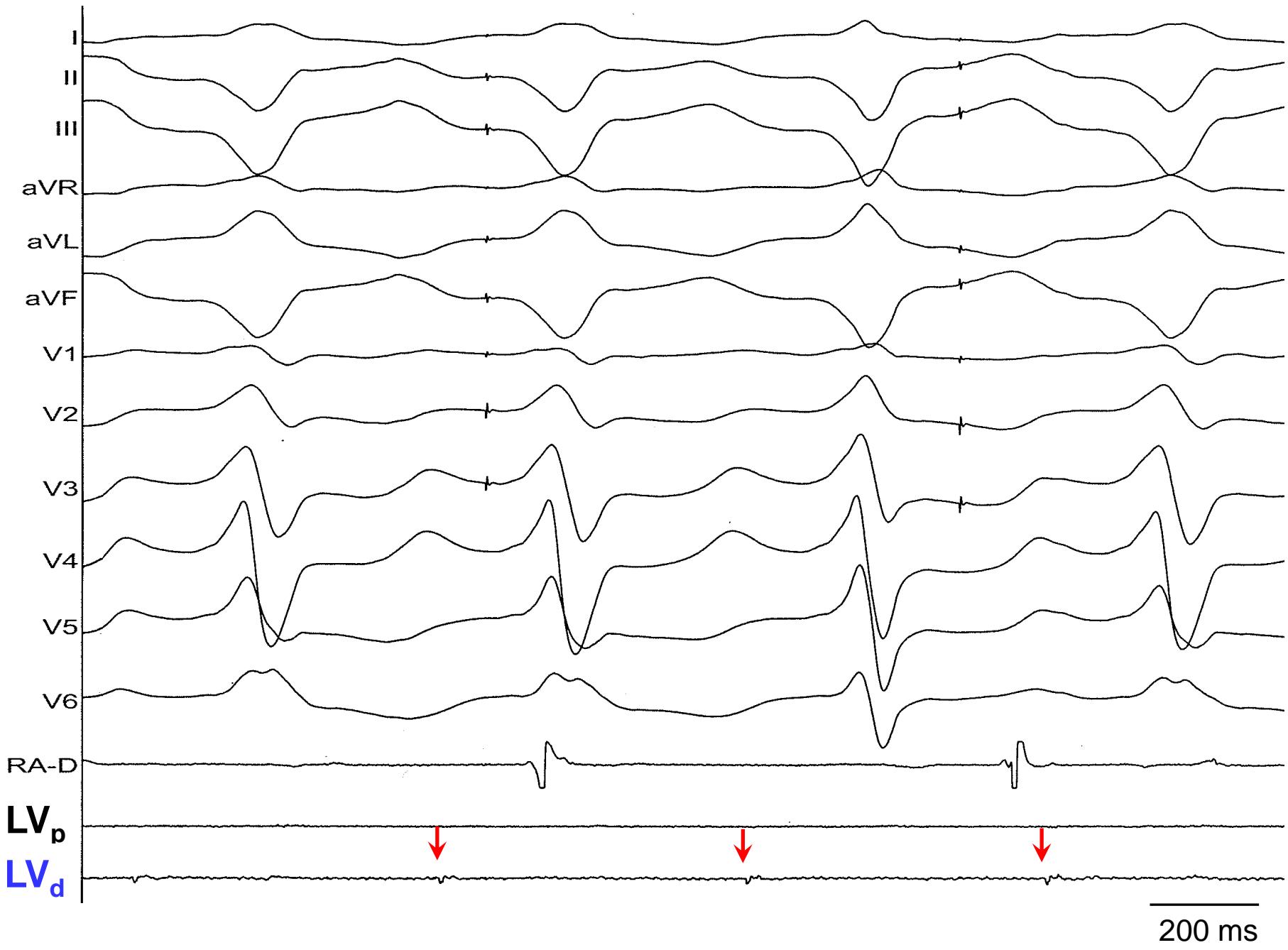


Figure 11.12B

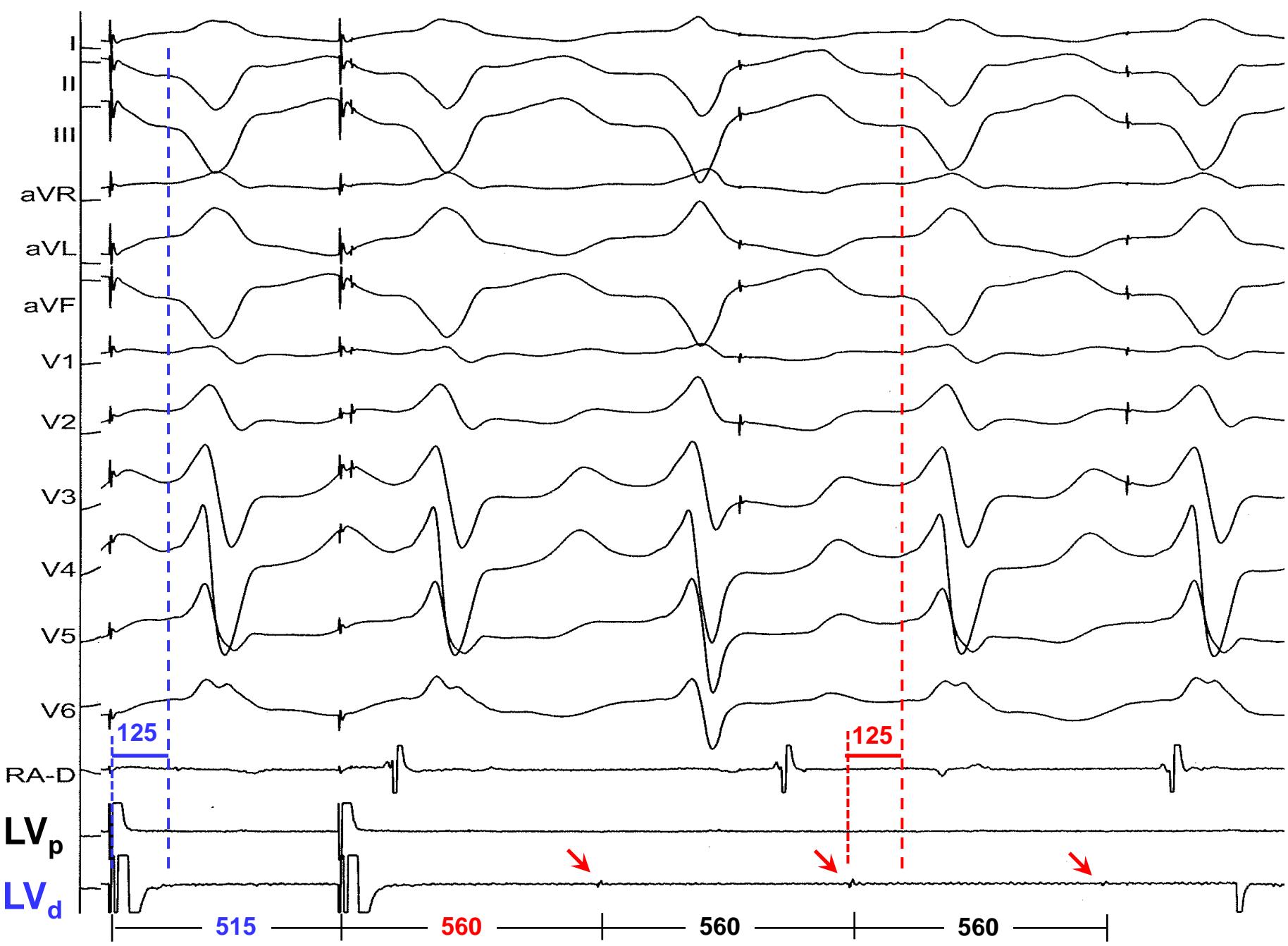


Figure 11.12C

200 ms

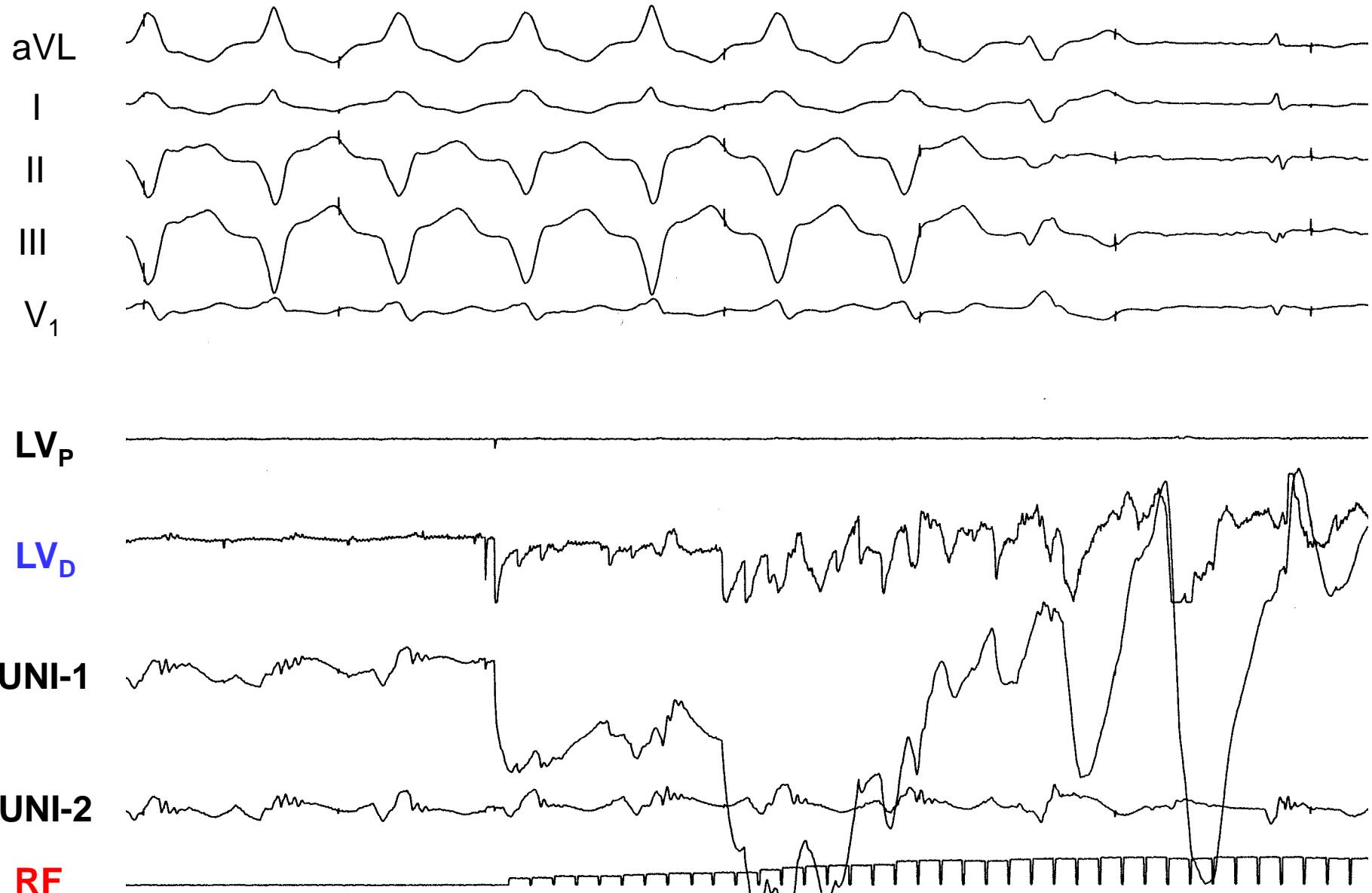


Figure 11.12D

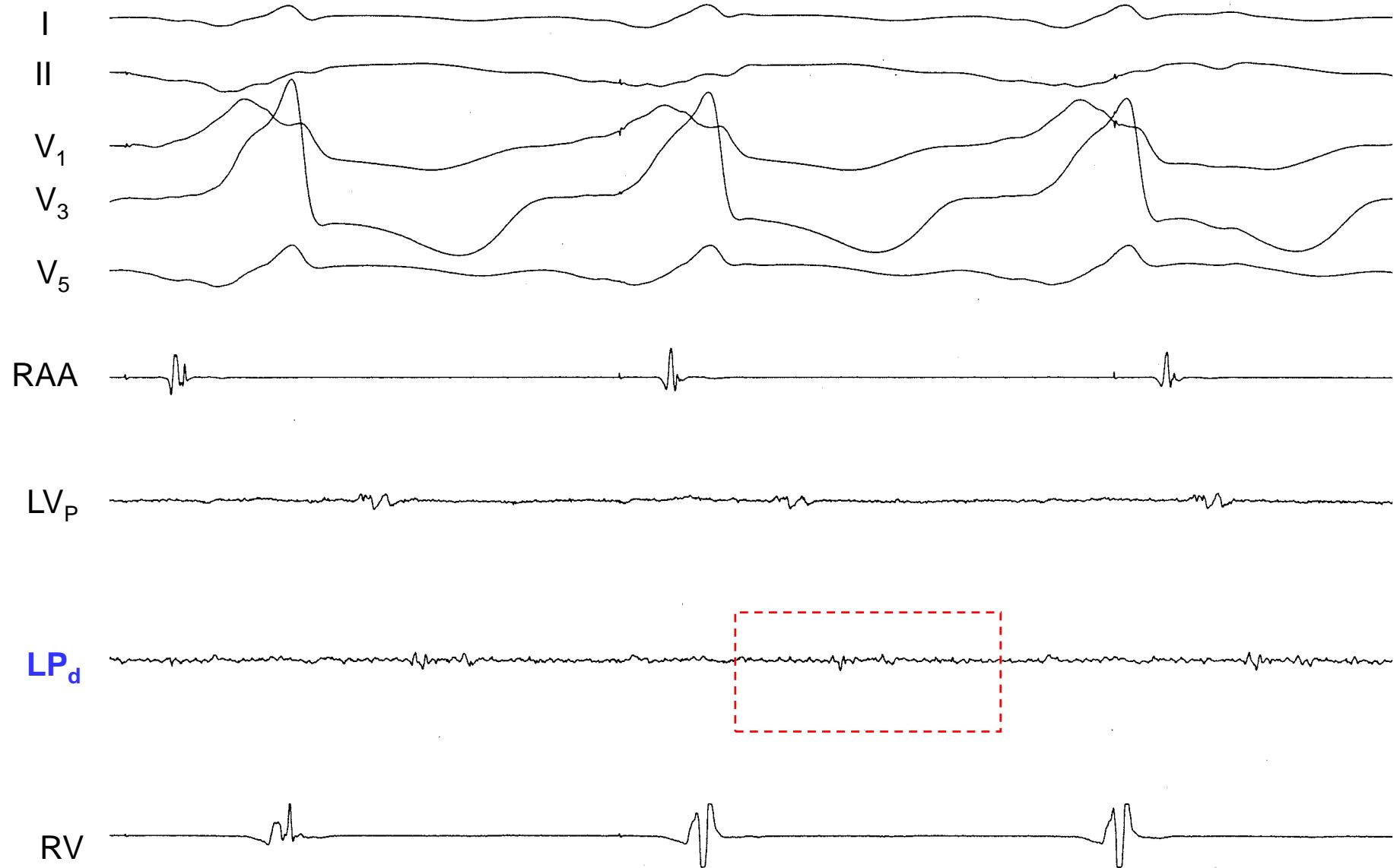


Figure 11.13A

200 ms

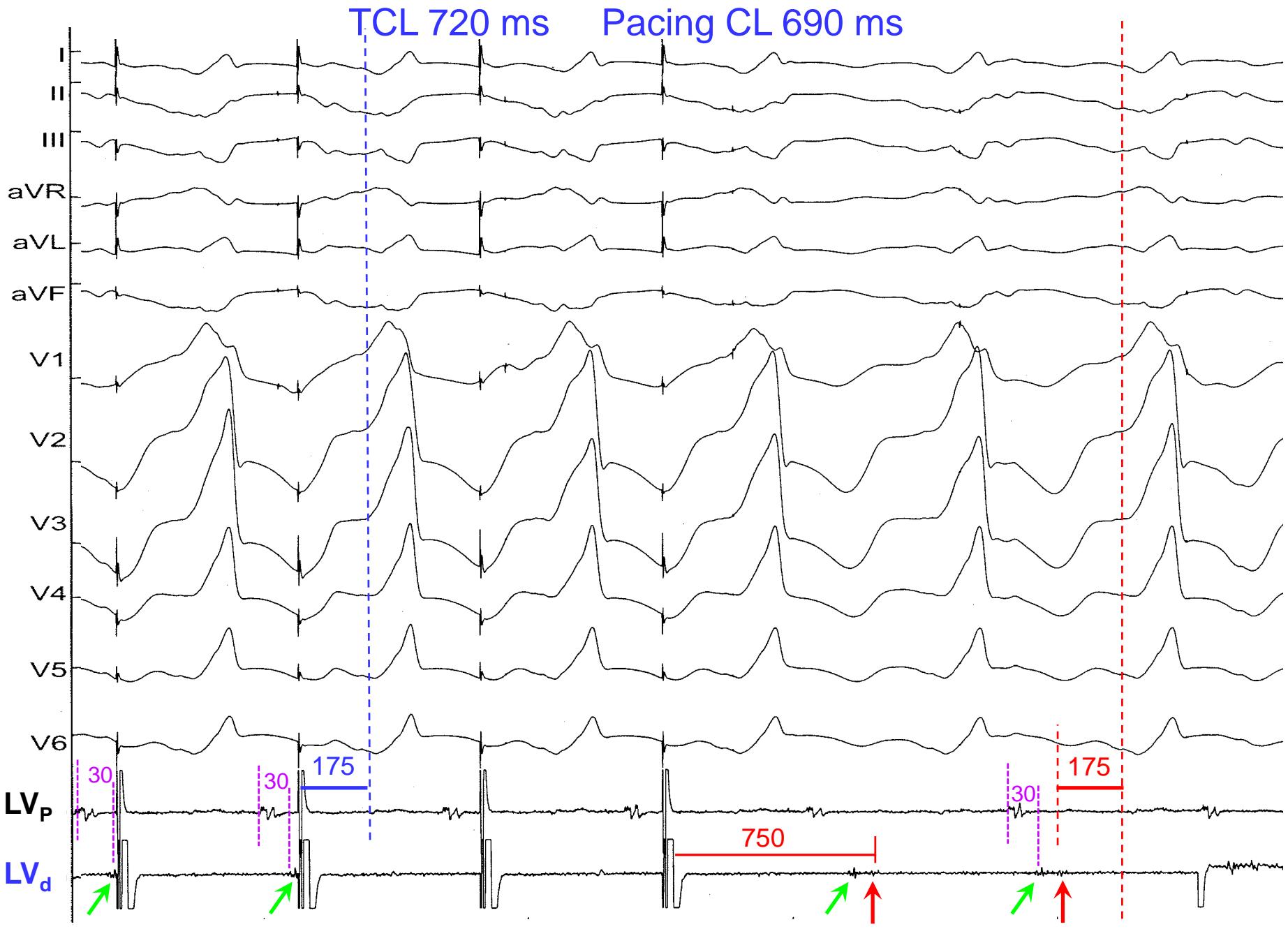


Figure 11.13B

200 ms

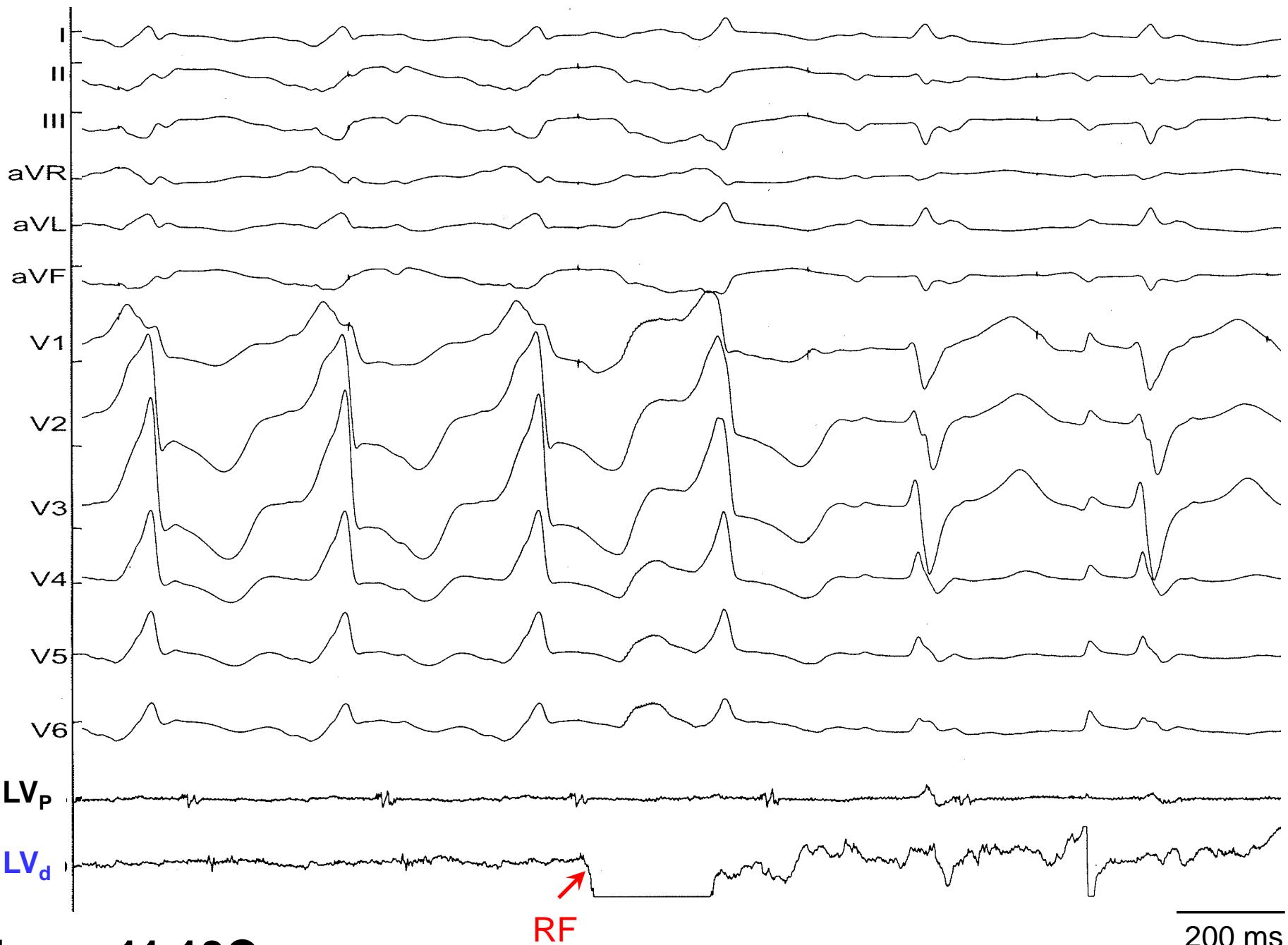


Figure 11.13C

Pre-Ablation

Post-Ablation

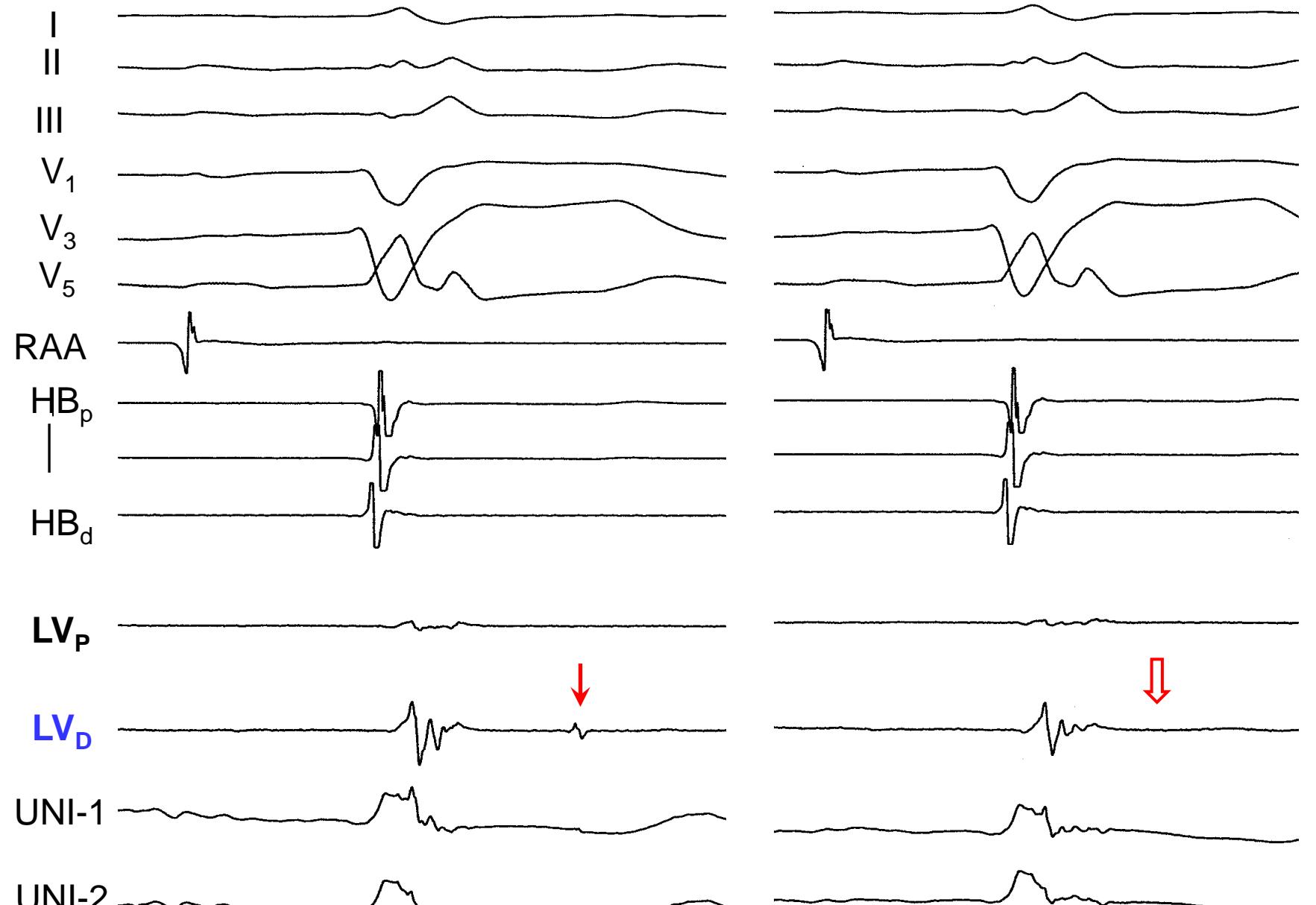
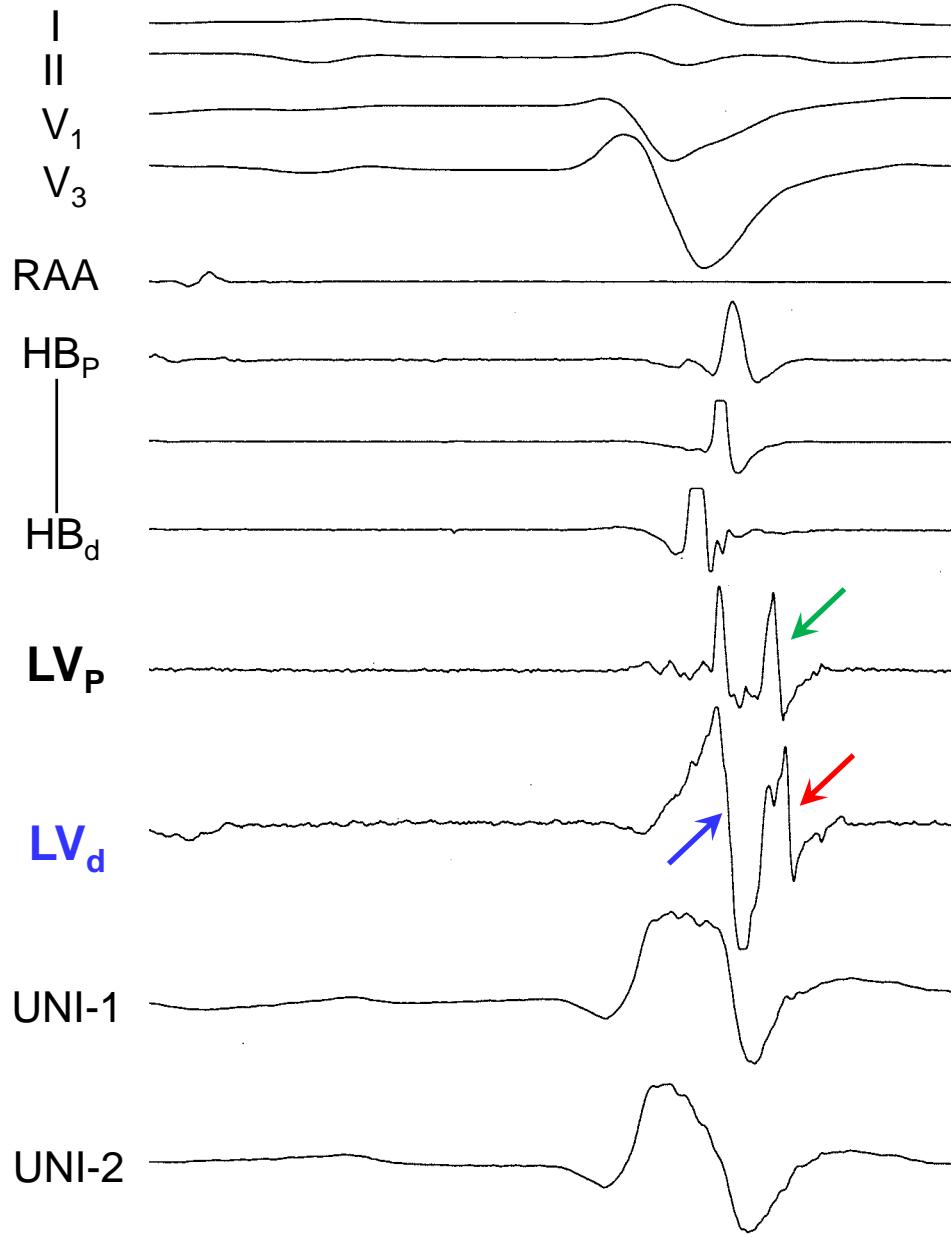


Figure 11.14A

200 ms

Before Ablation



After Ablation

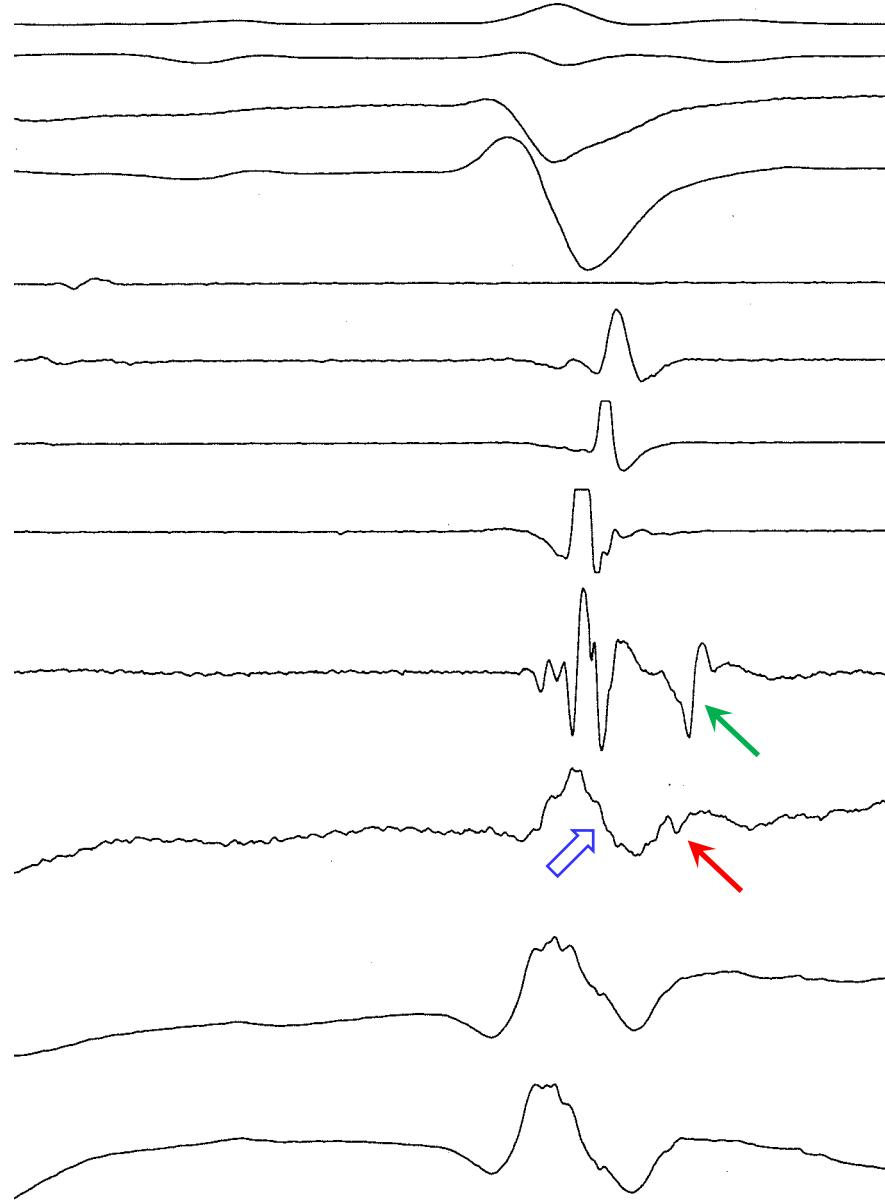


Figure 11.14B

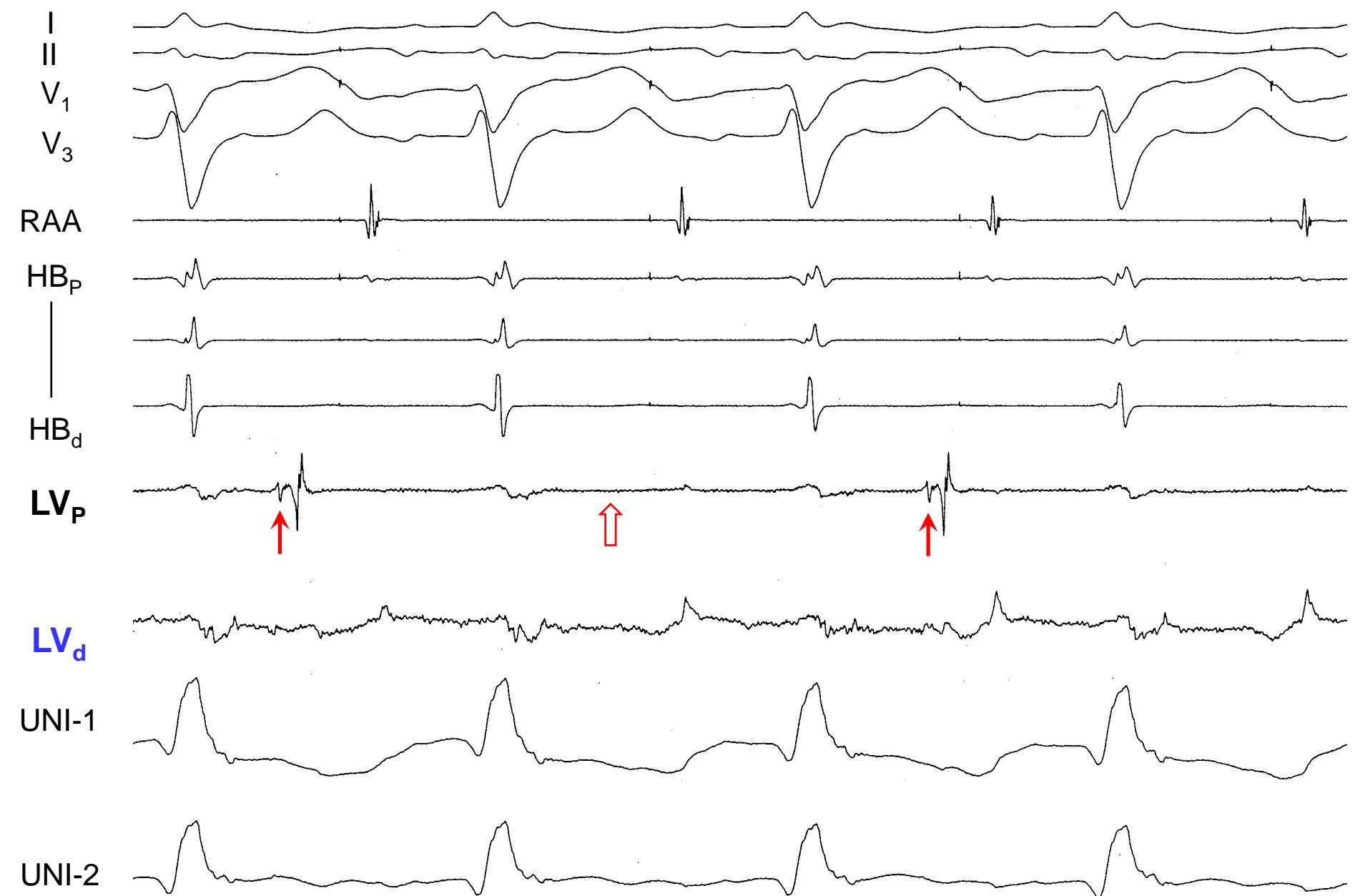


Figure 11.14C

200 ms

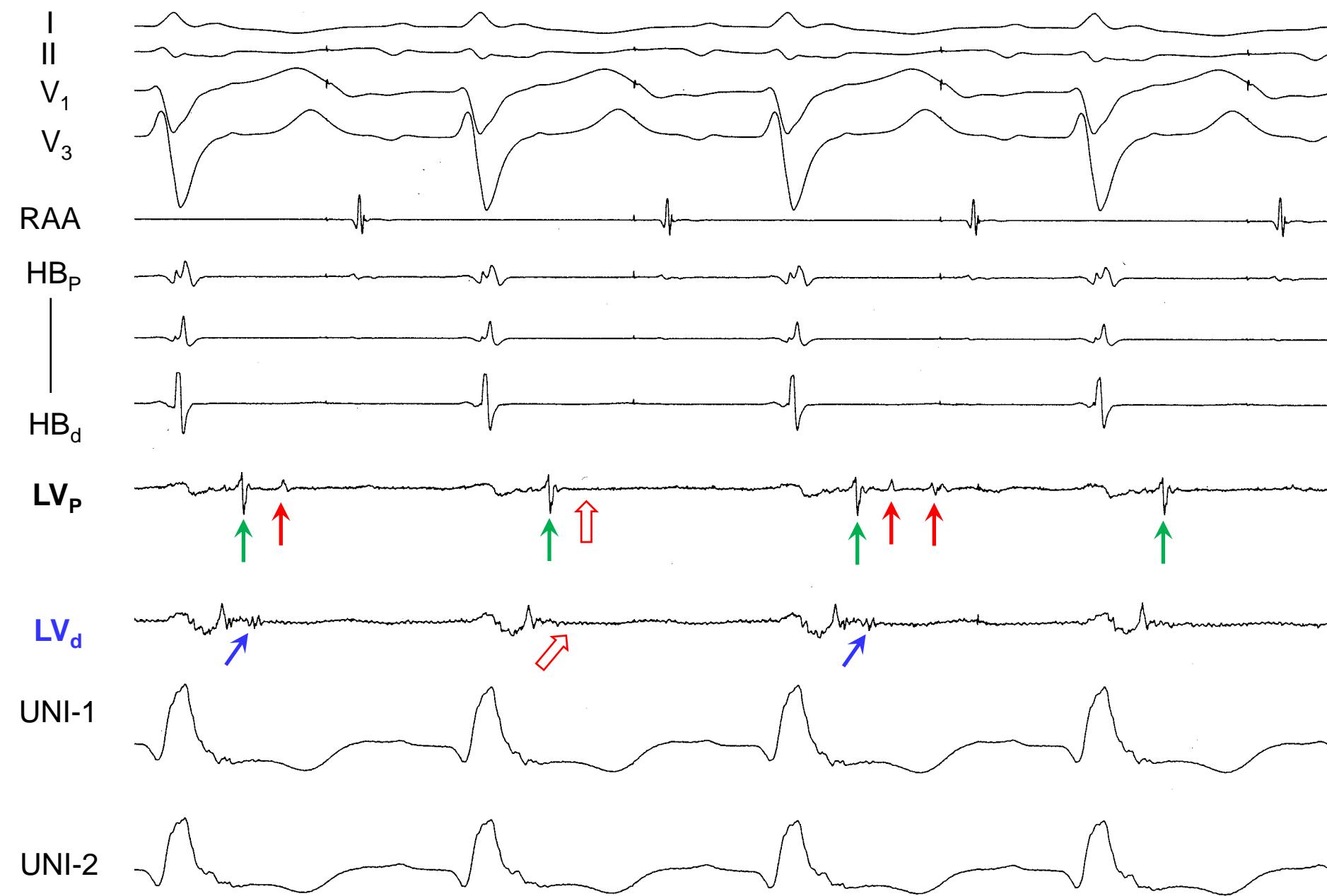
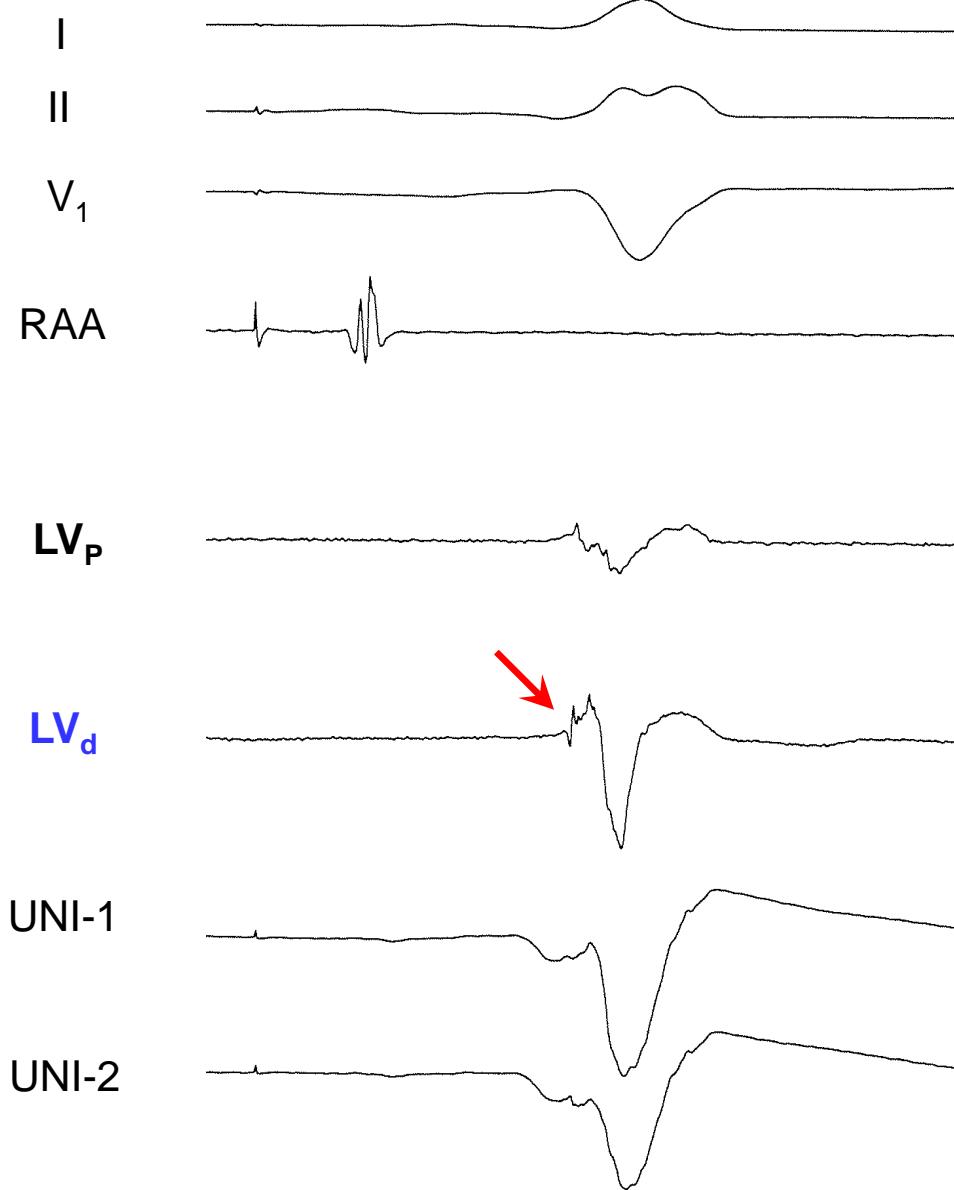


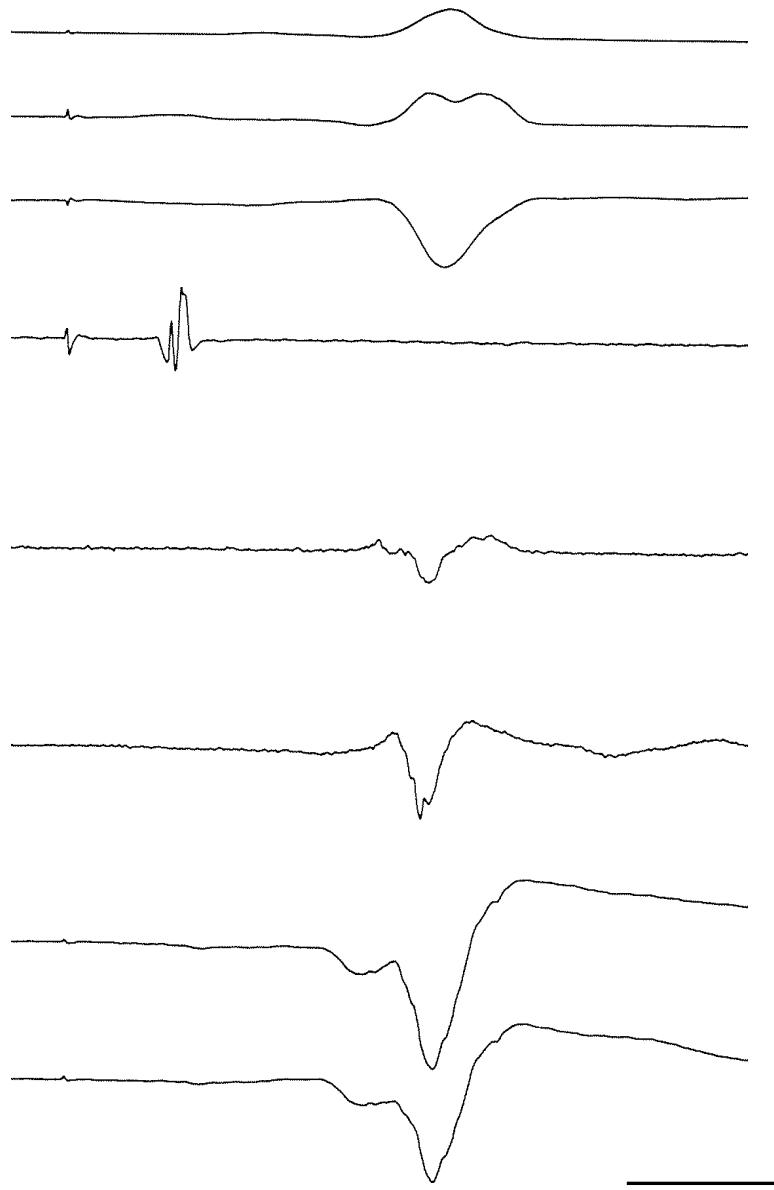
Figure 11.14D

200 ms

Pre-Ablation



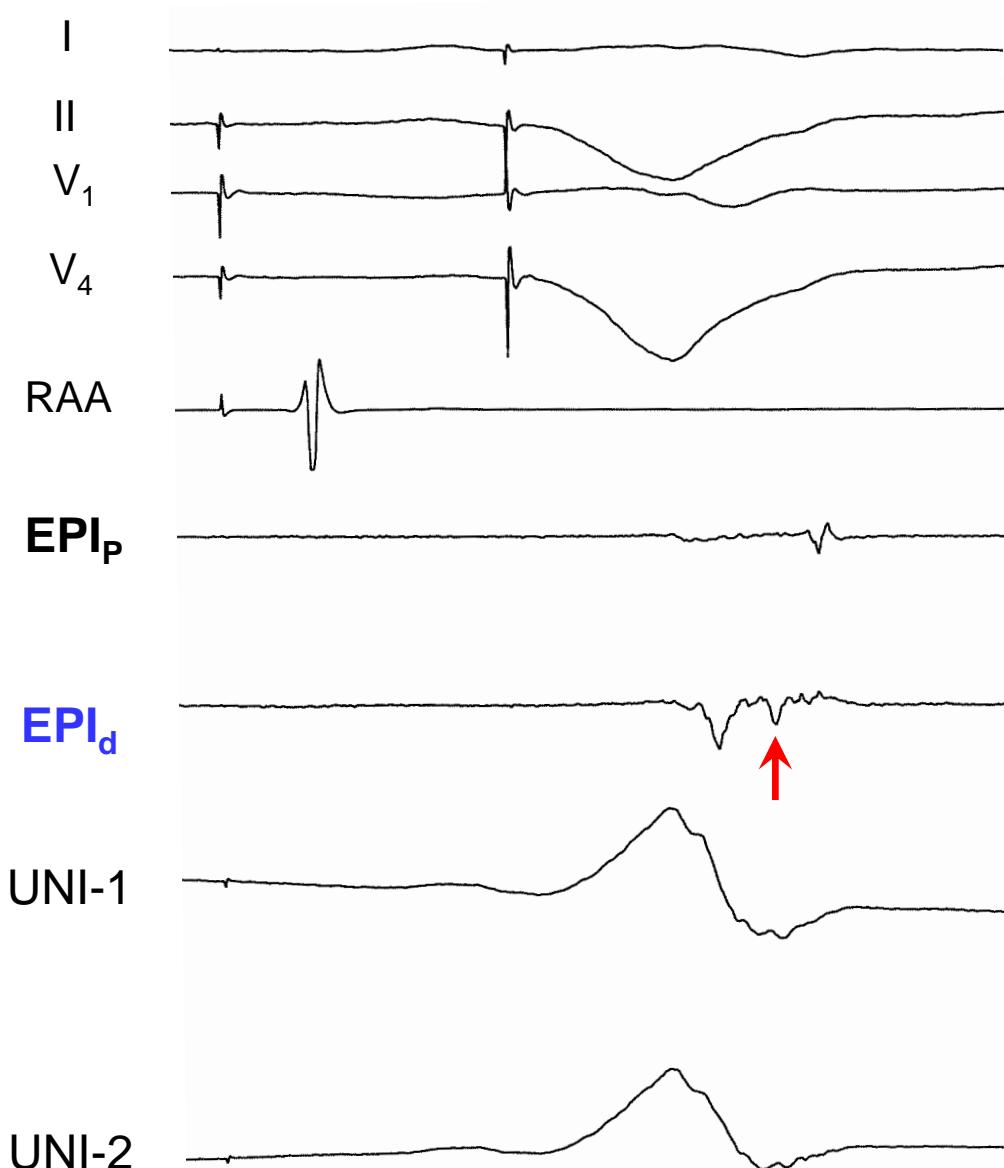
Post-Ablation



100 ms

Figure 11.14E

Before Ablation



After Ablation

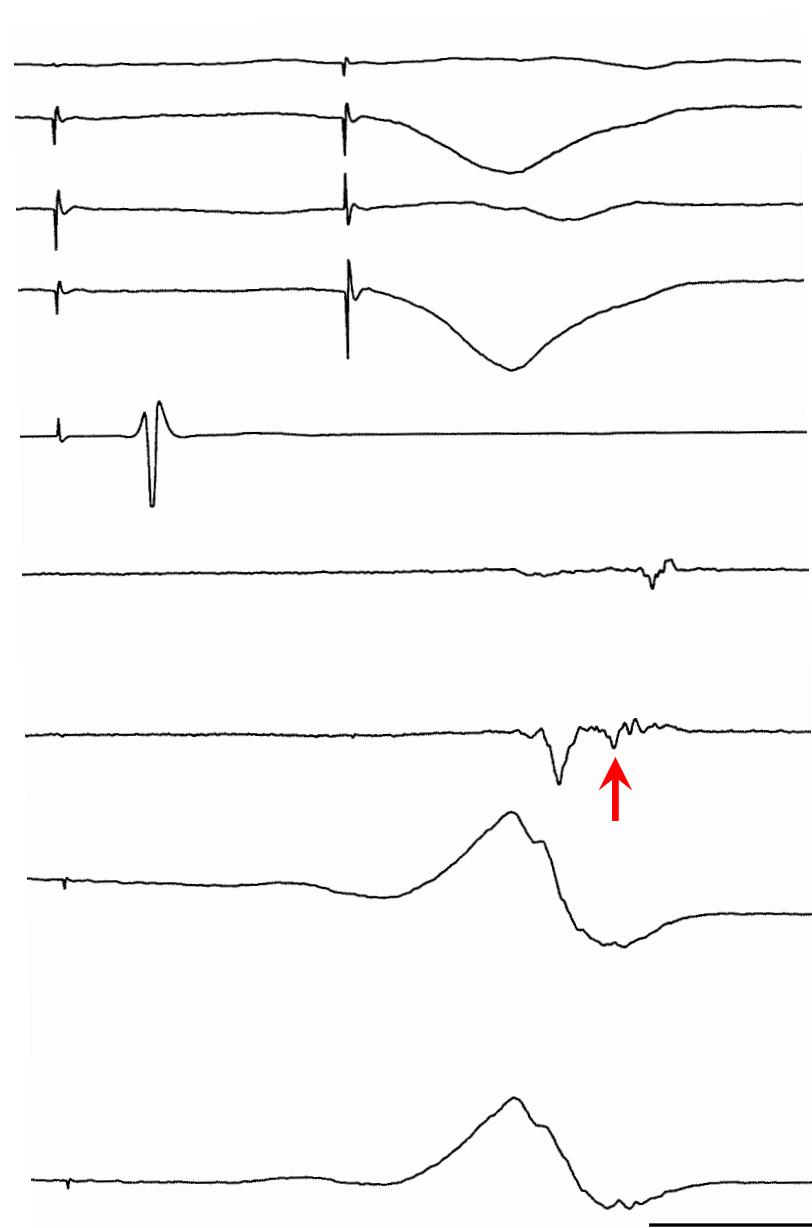


Figure 11.14F

100 ms

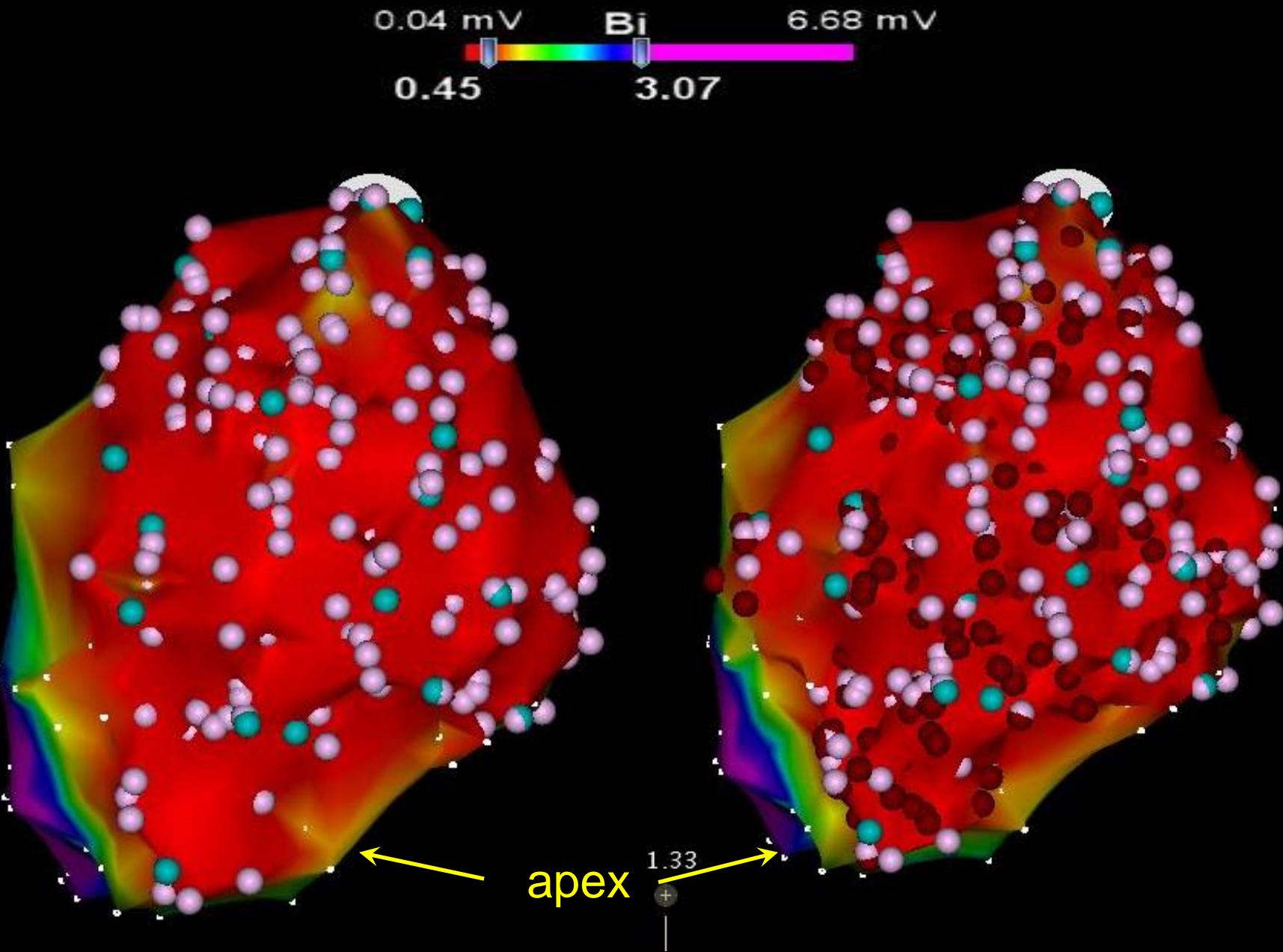
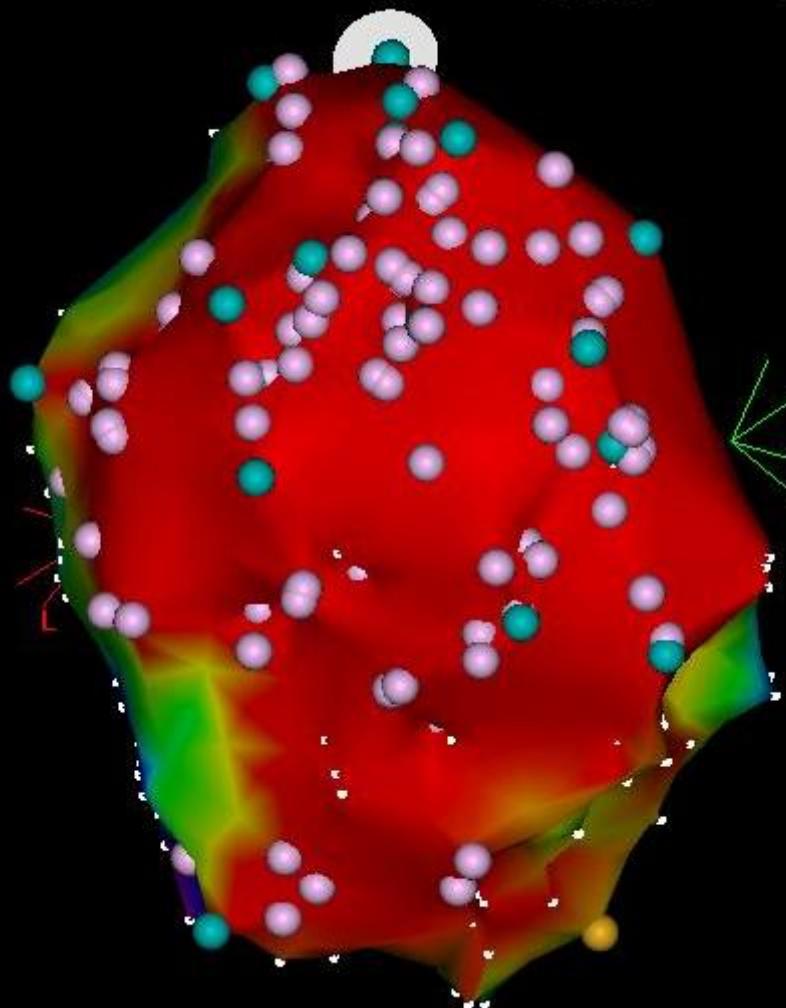
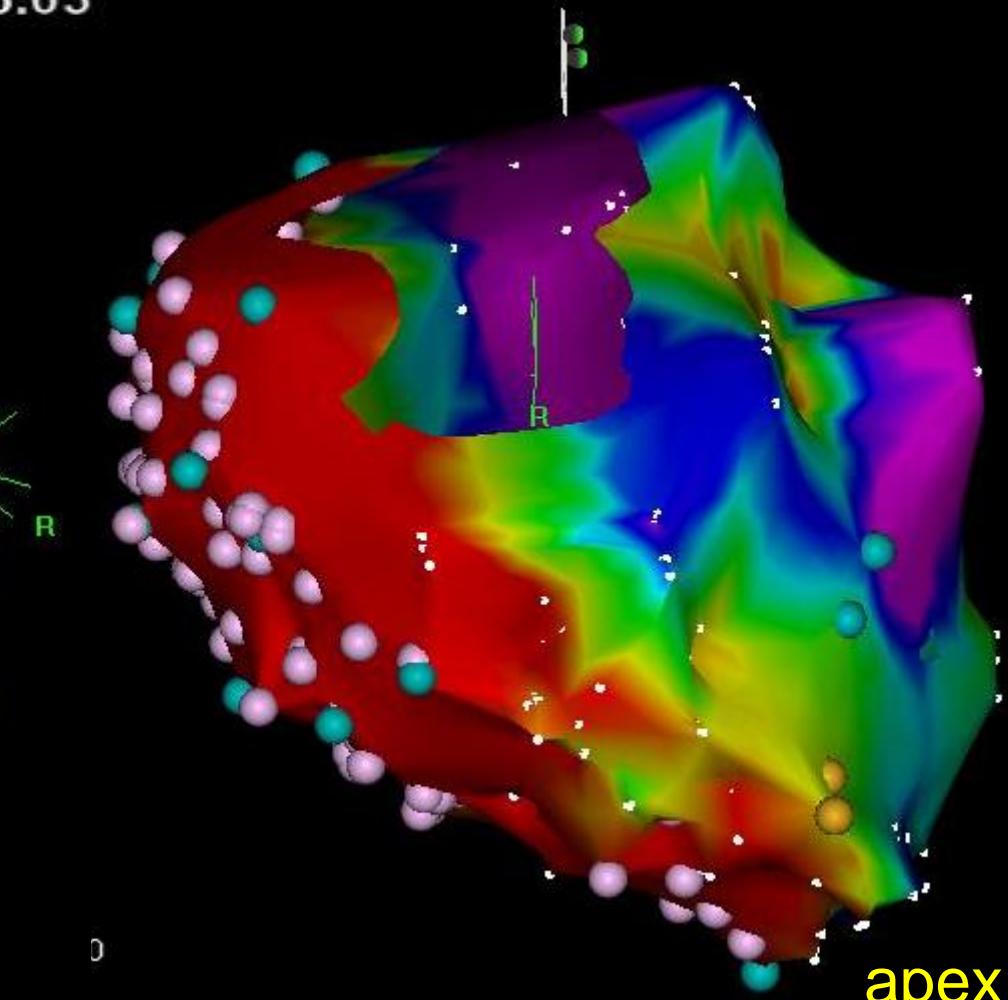


Figure 11.15A

LV bottom view



LV bottom view

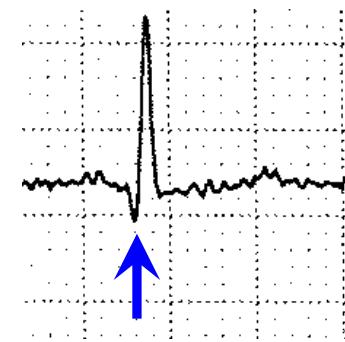
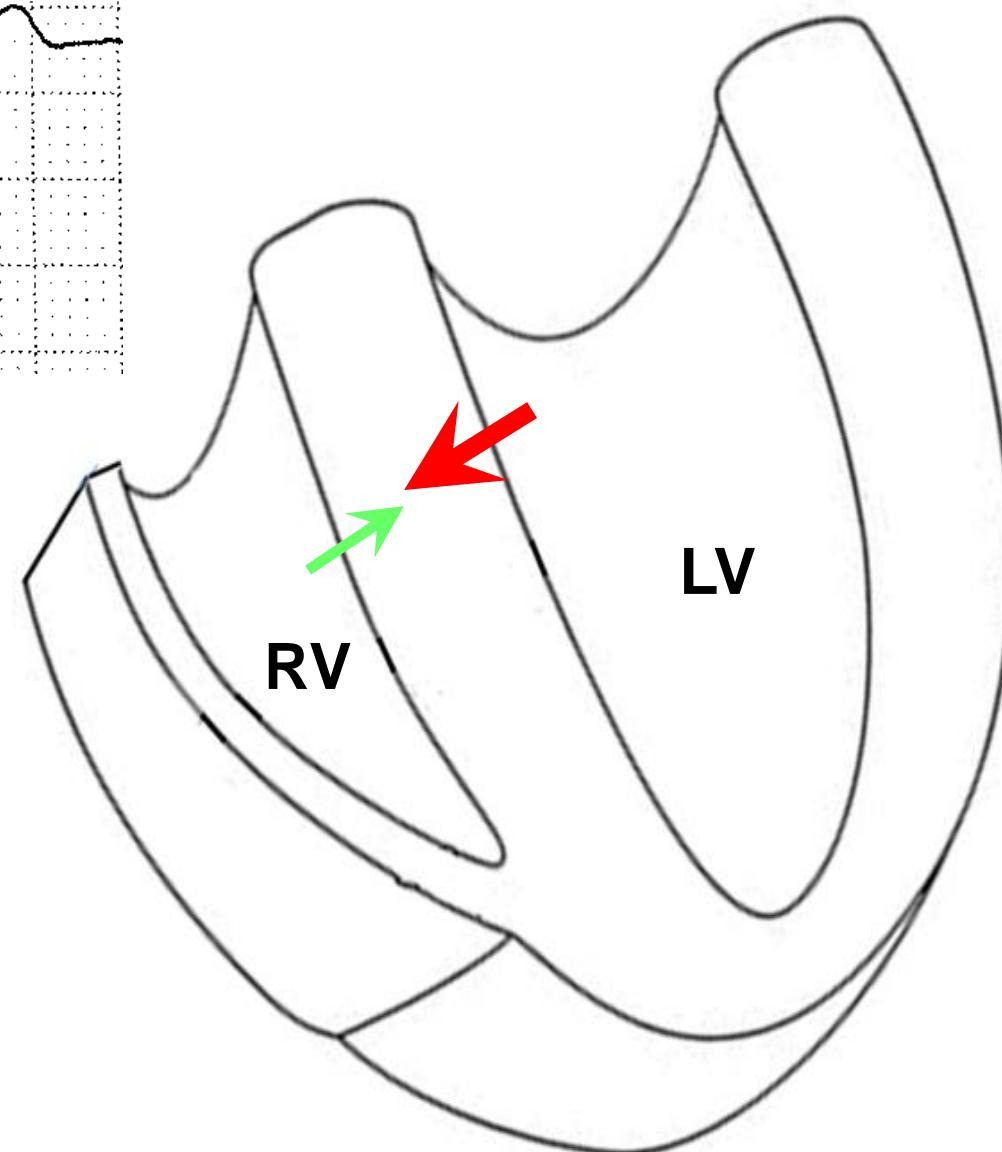


Right lateral view

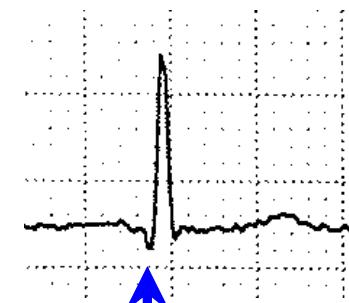
Figure 11.15B



V1



Lead I



V6

Figure 11.16A.

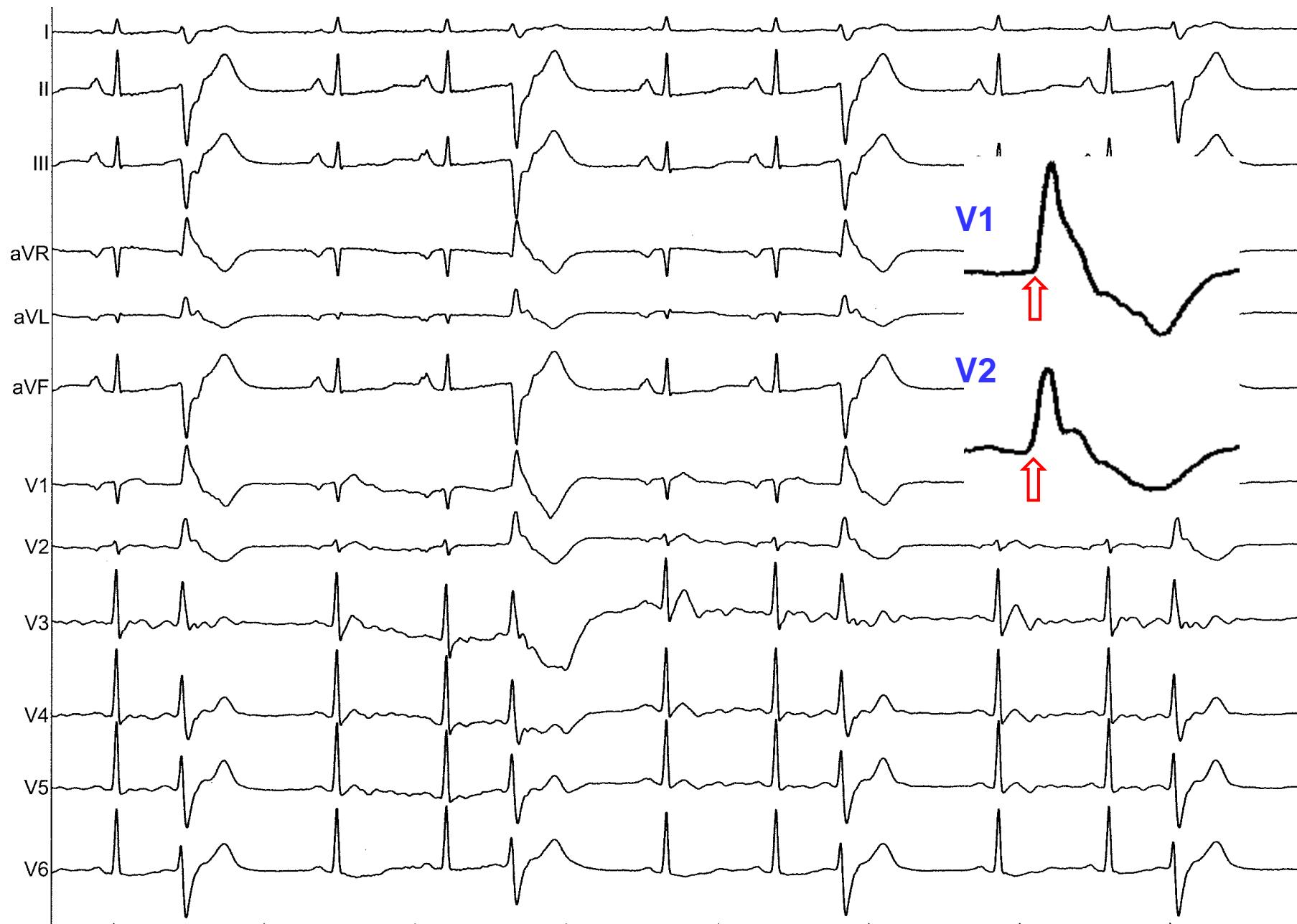


Figure 11.16B.

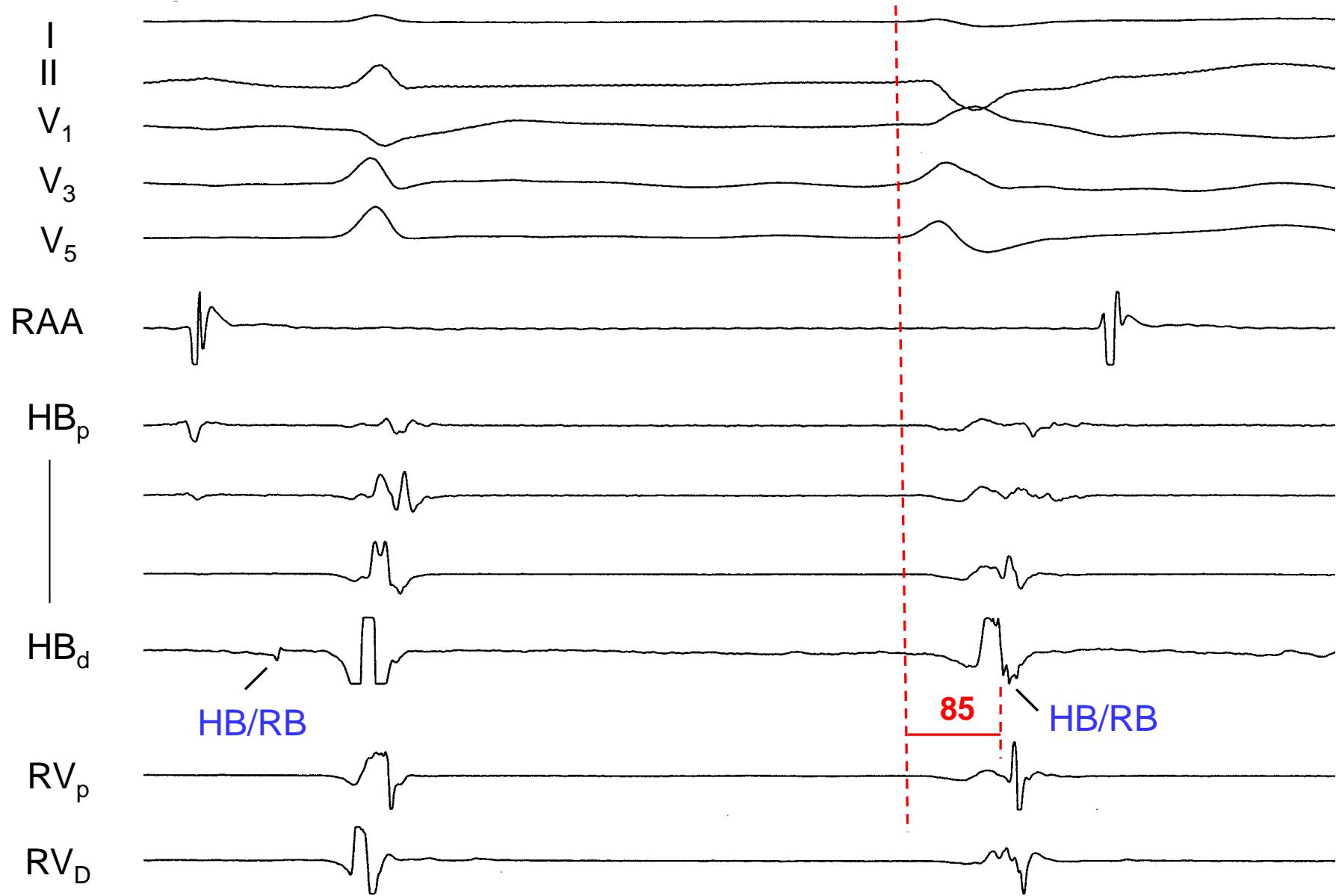


Figure 11.16C.

100 ms

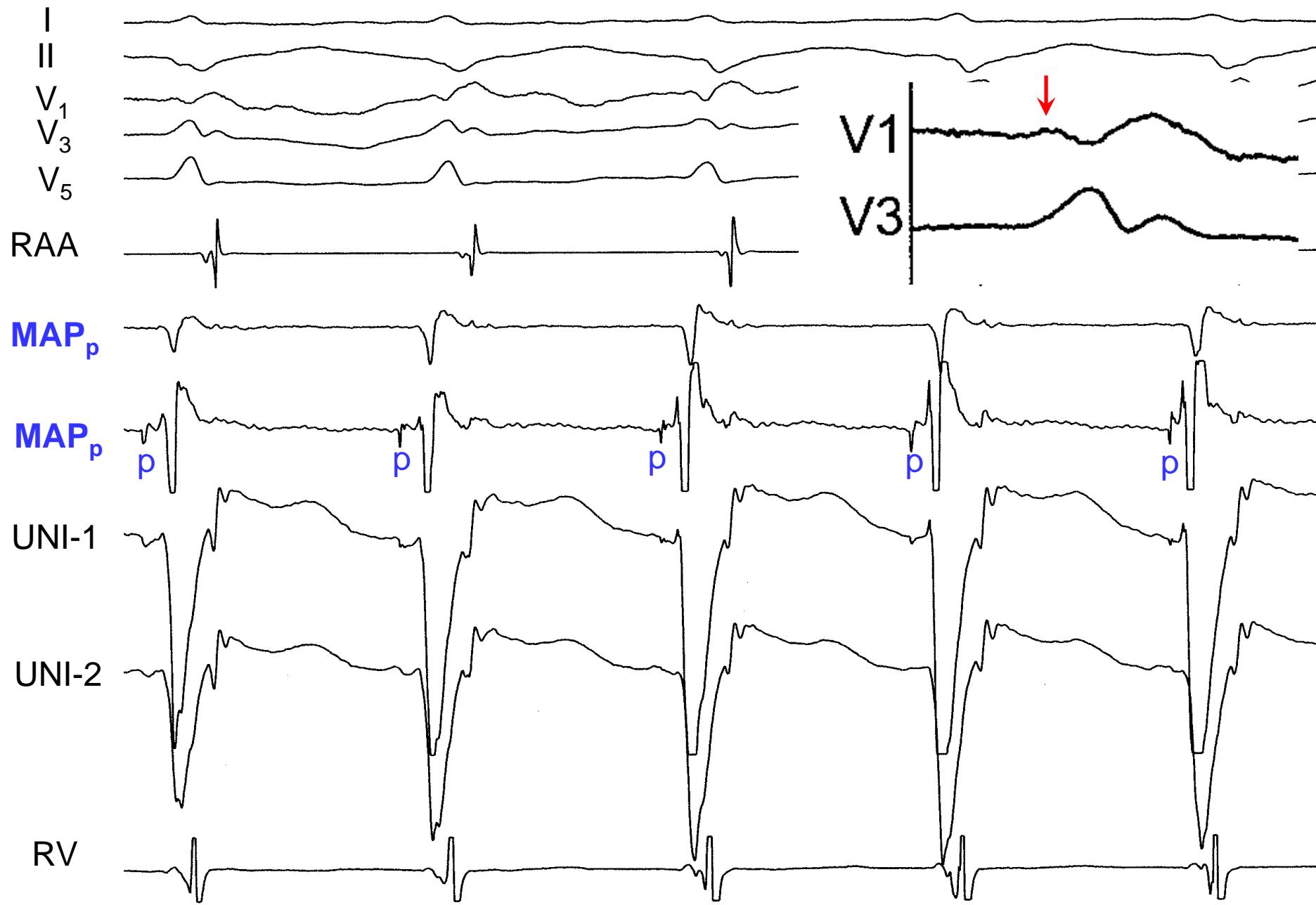


Figure 11.16D.

200 ms

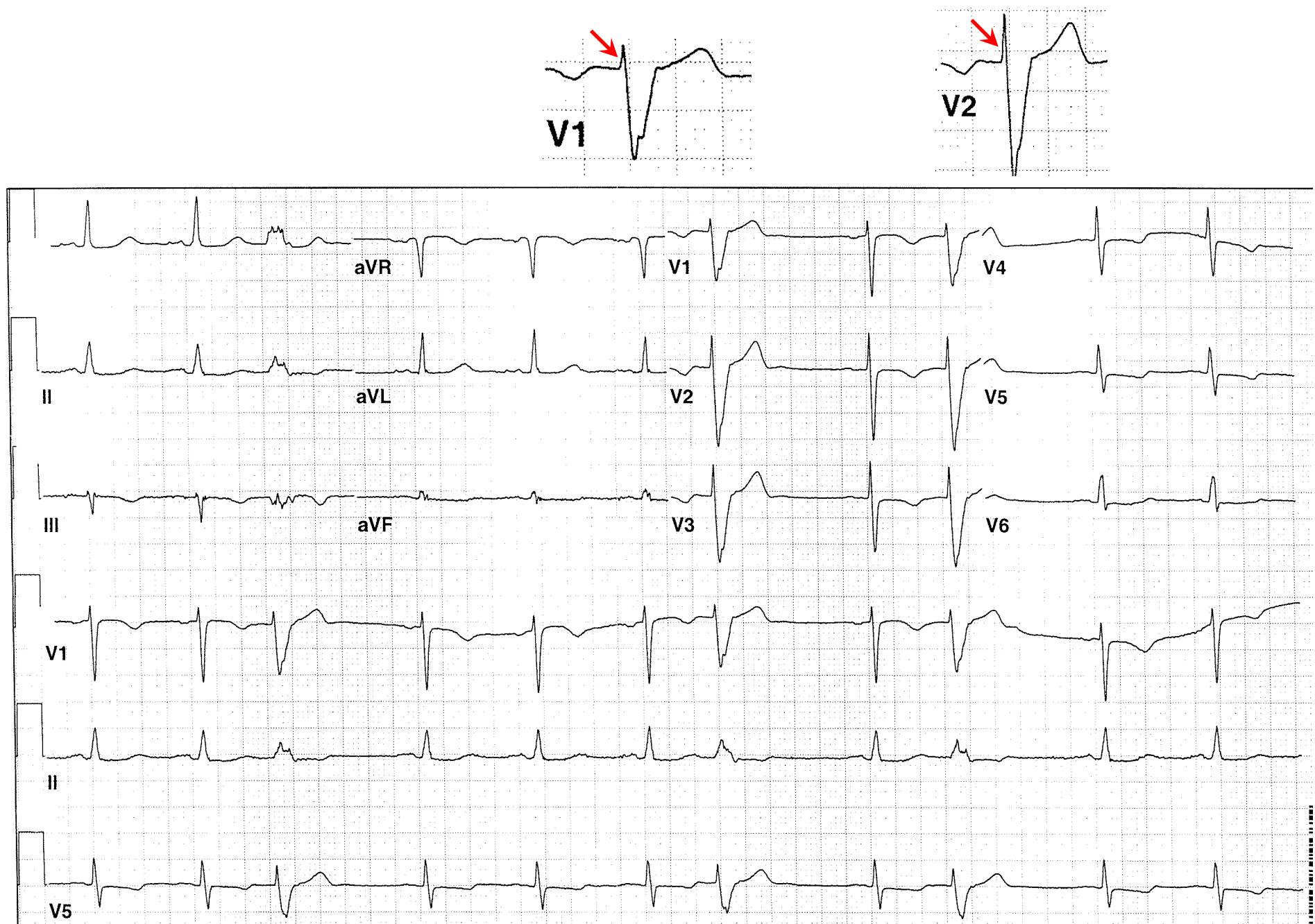
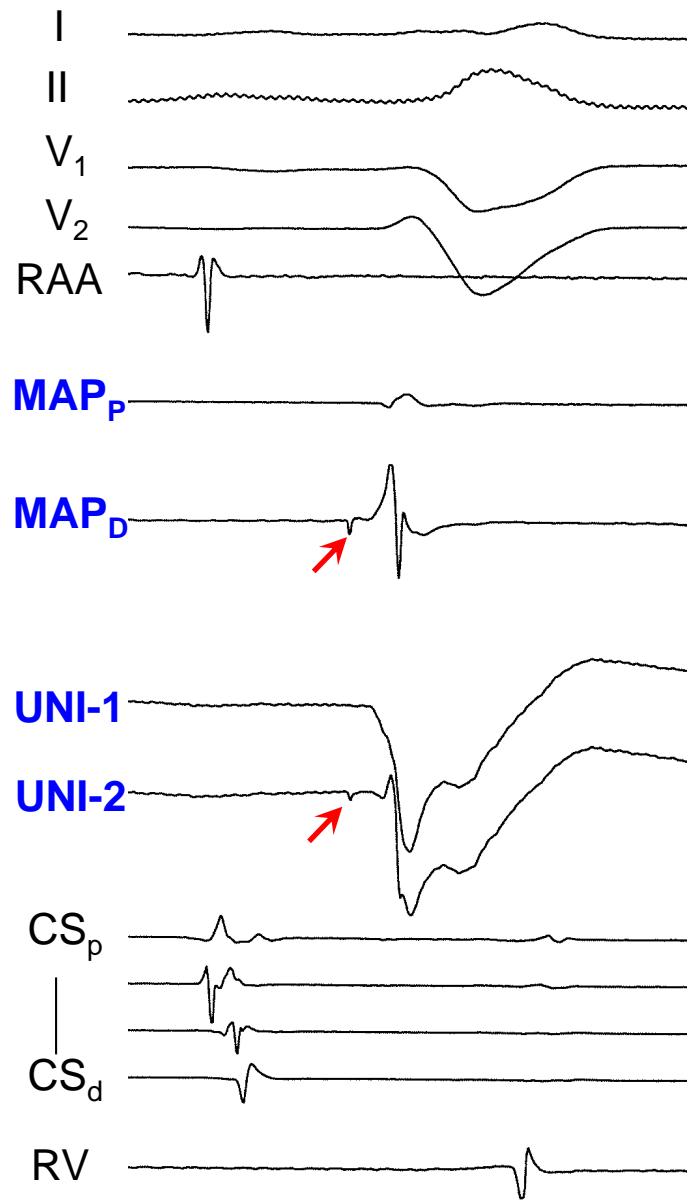
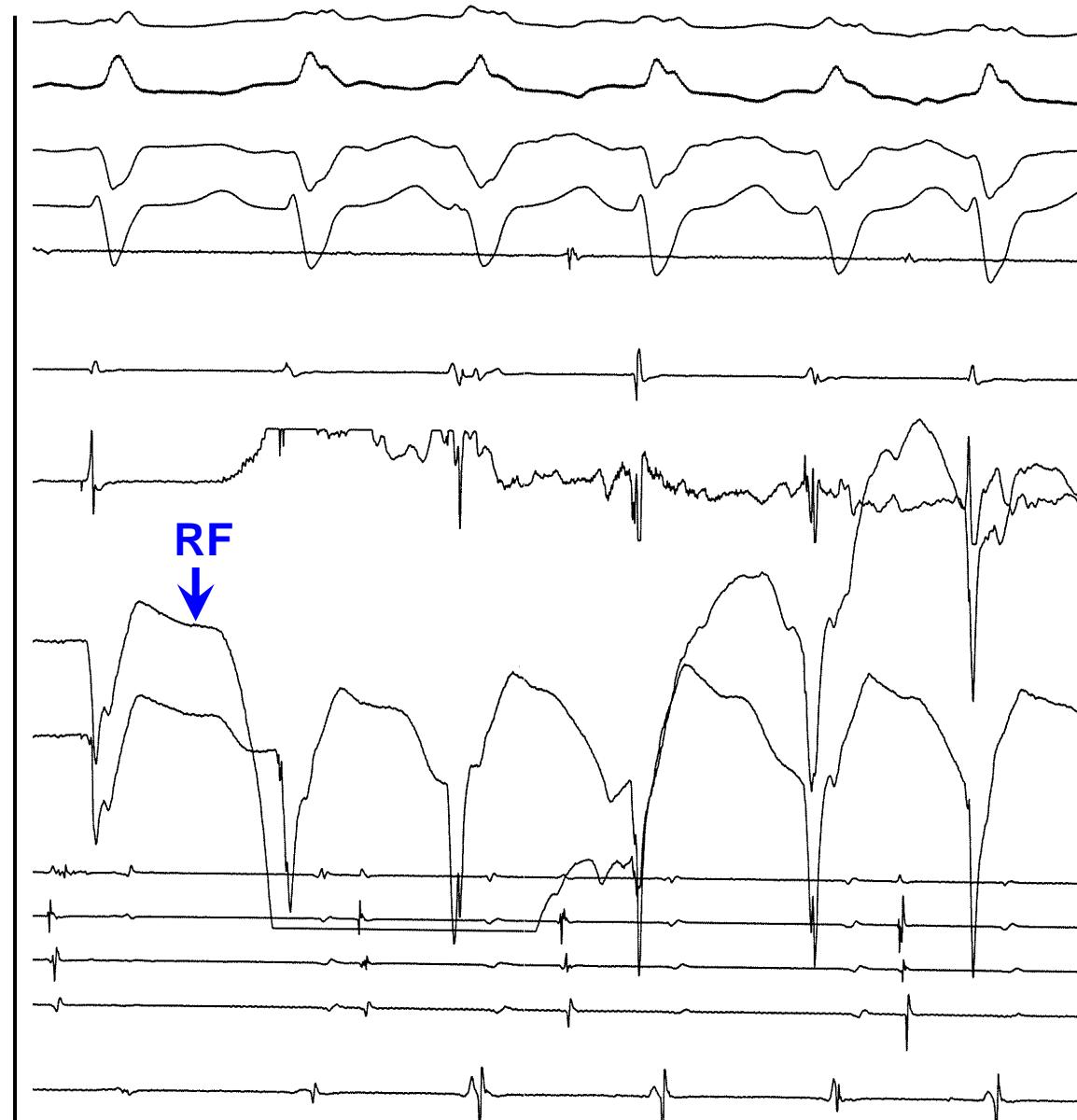


Figure 11.16E.



100 ms



400 ms

Figure 11.16F.

VT

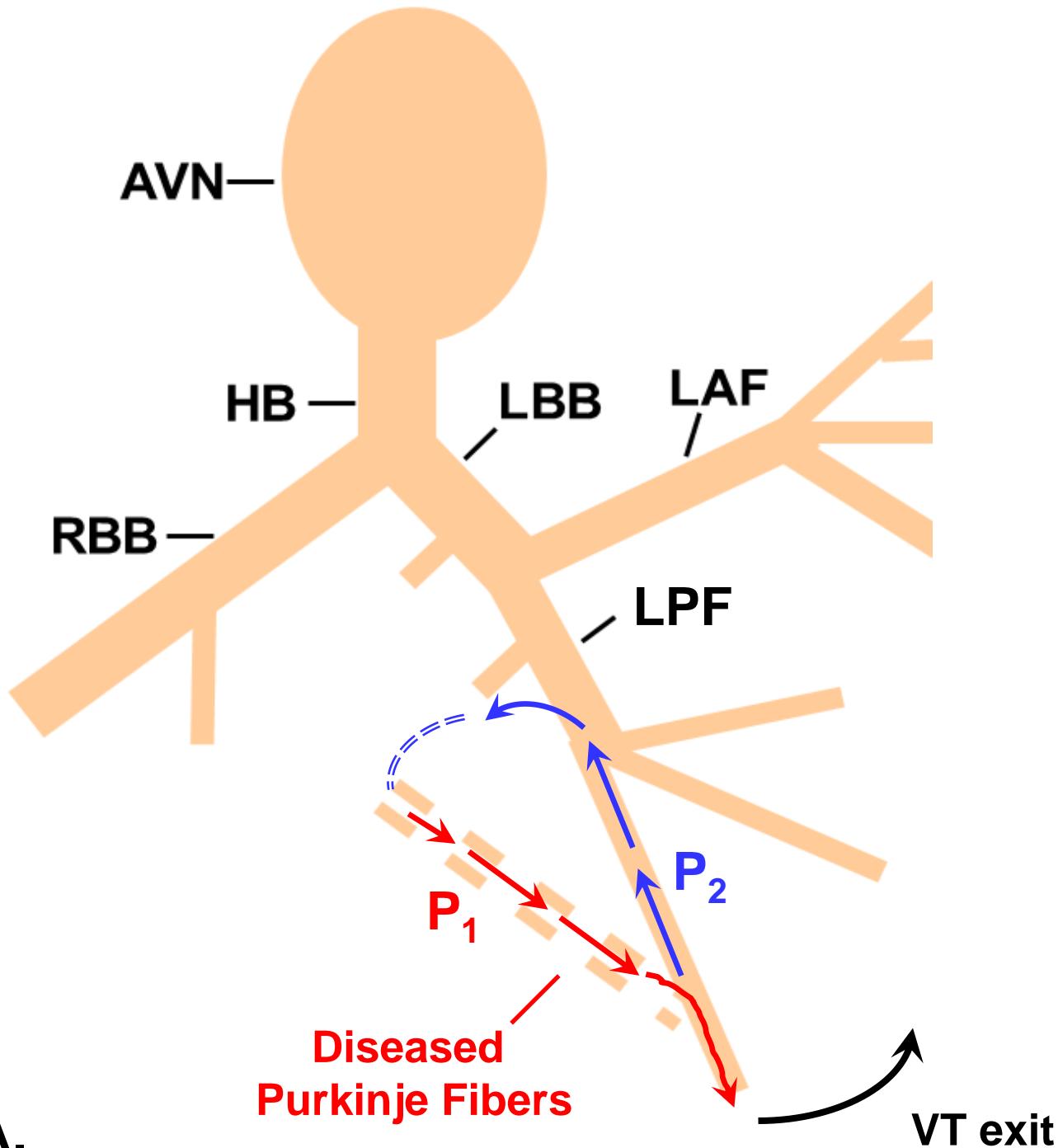


Figure 11.17A.

Sinus Rhythm

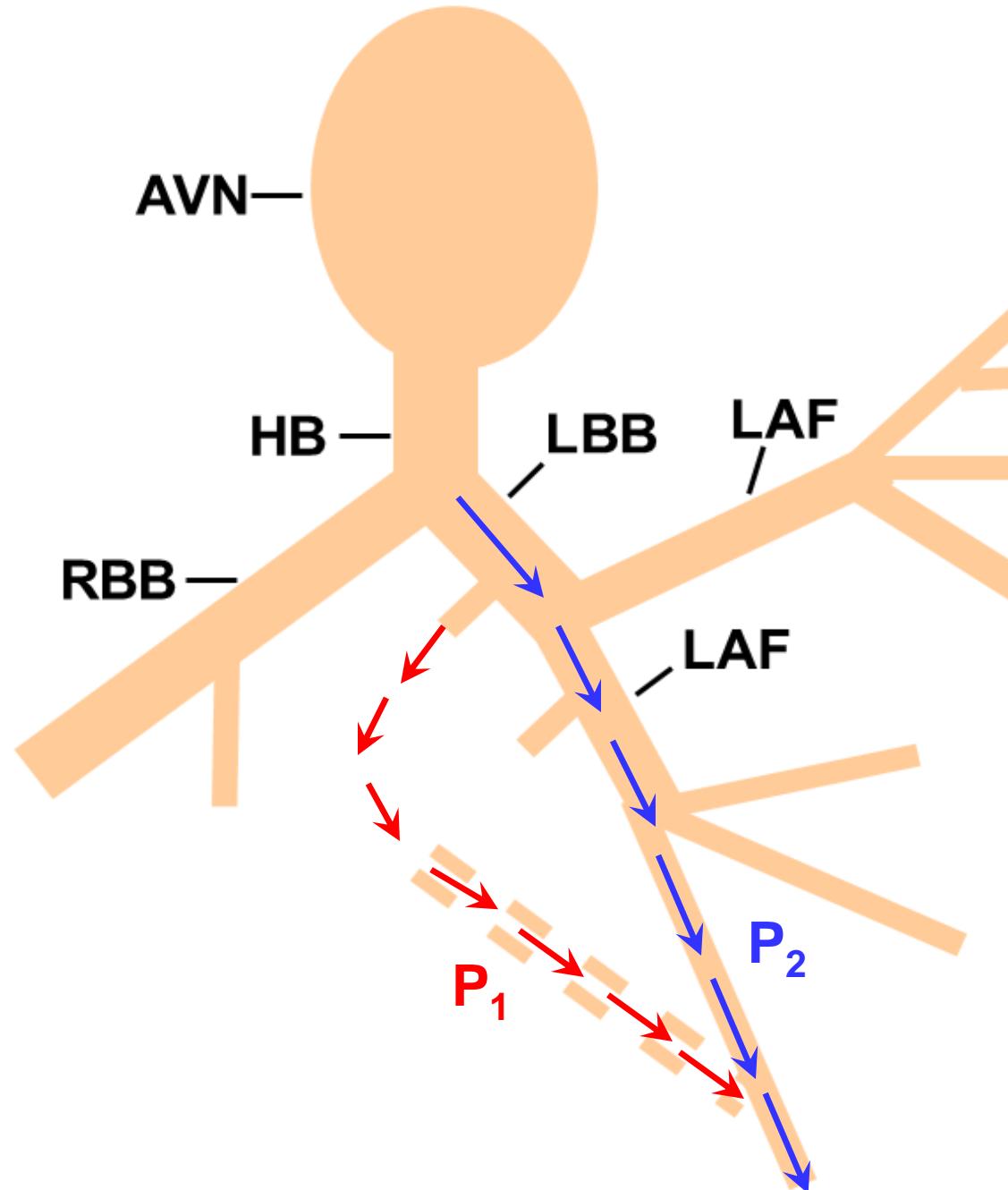


Figure 11.17B.

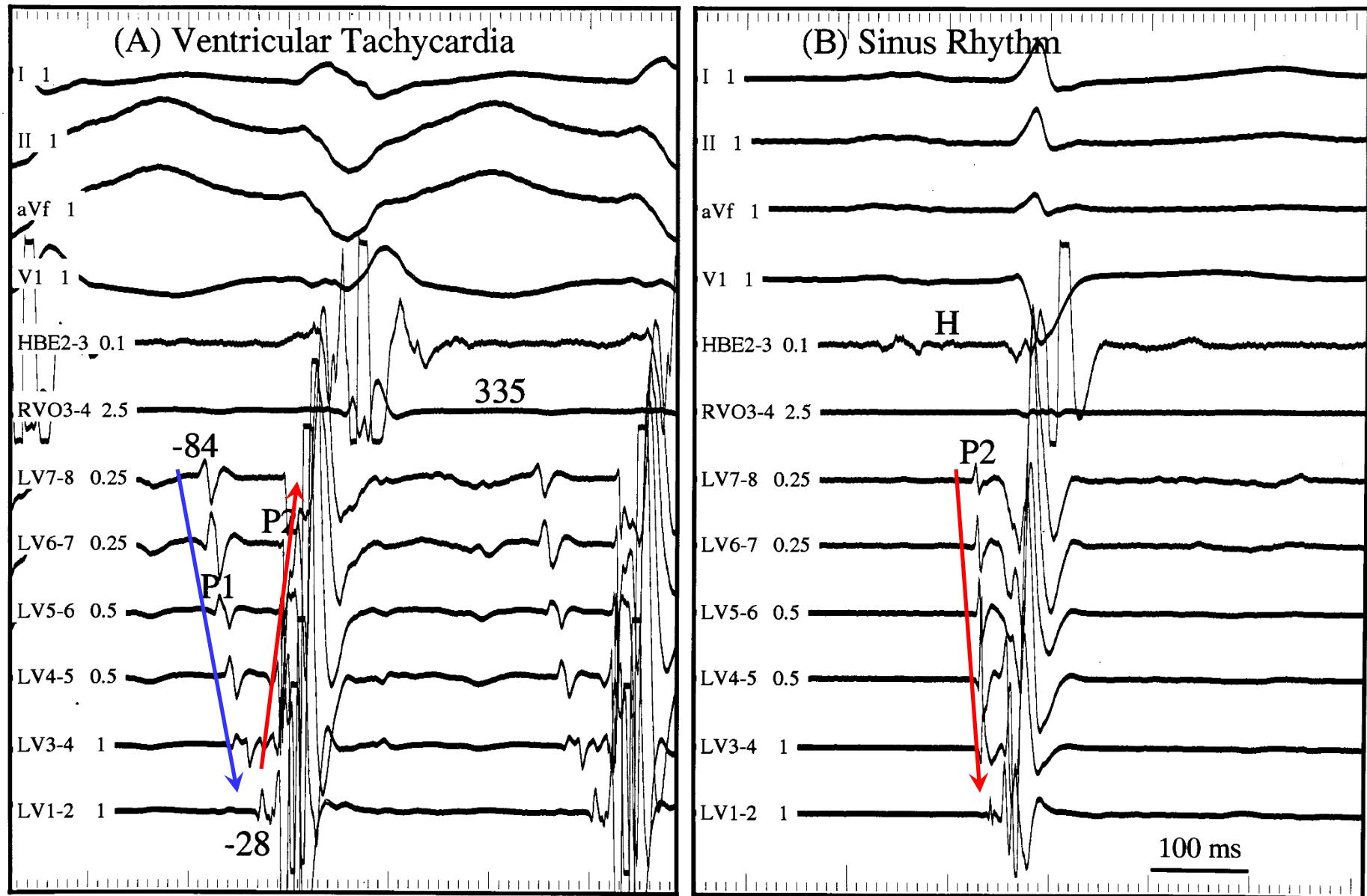


Figure 11.17C.

Nogami, J Am Coll Cardiol. 2000 Sep;36(3):811-23

Ventricular Tachycardia

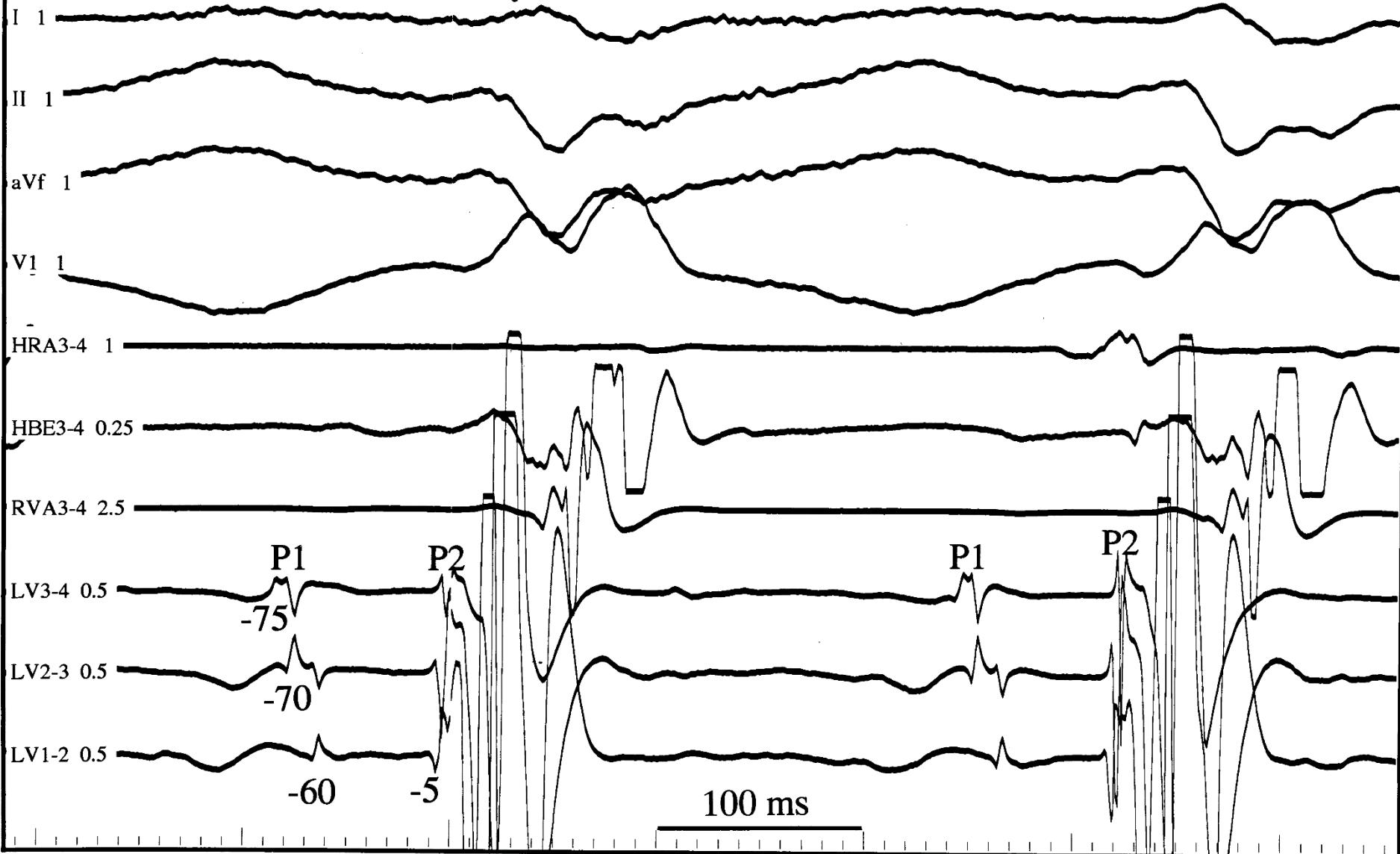


Figure 11.17D.

Nogami, J Am Coll Cardiol. 2000 Sep;36(3):811-23

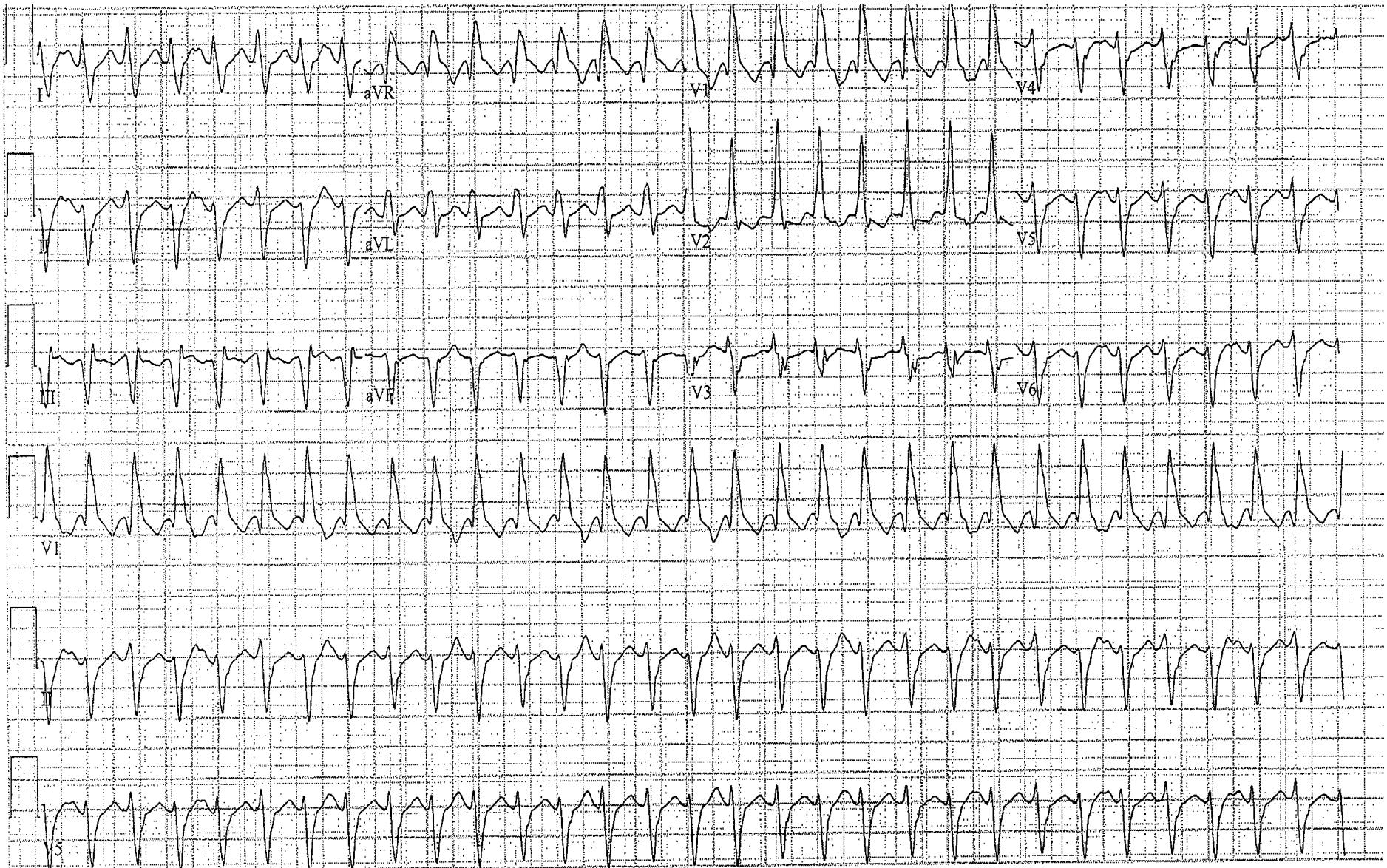


Figure 11.18A.

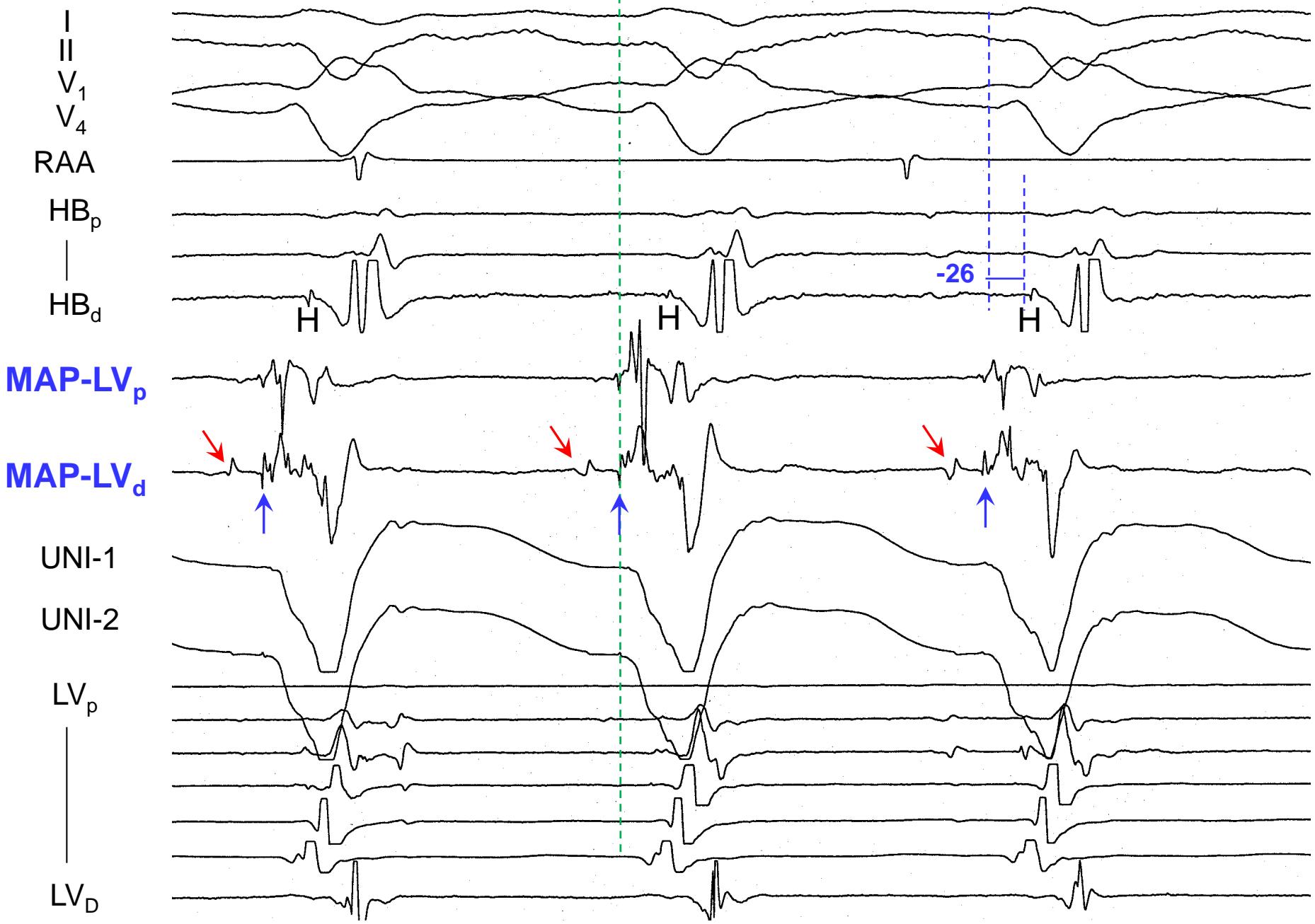


Figure 11.18B.

100 ms

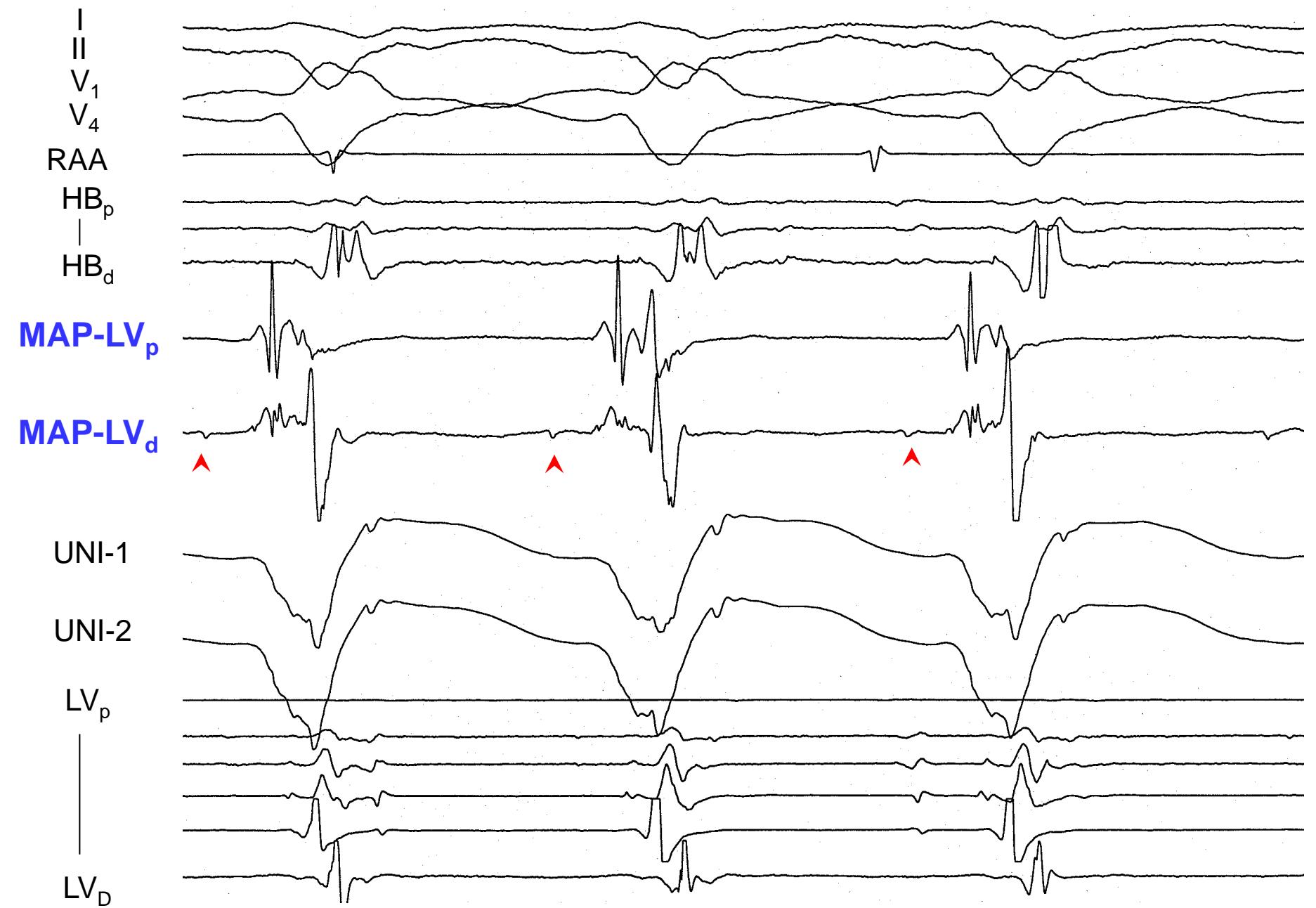


Figure 11.18C.

100 ms

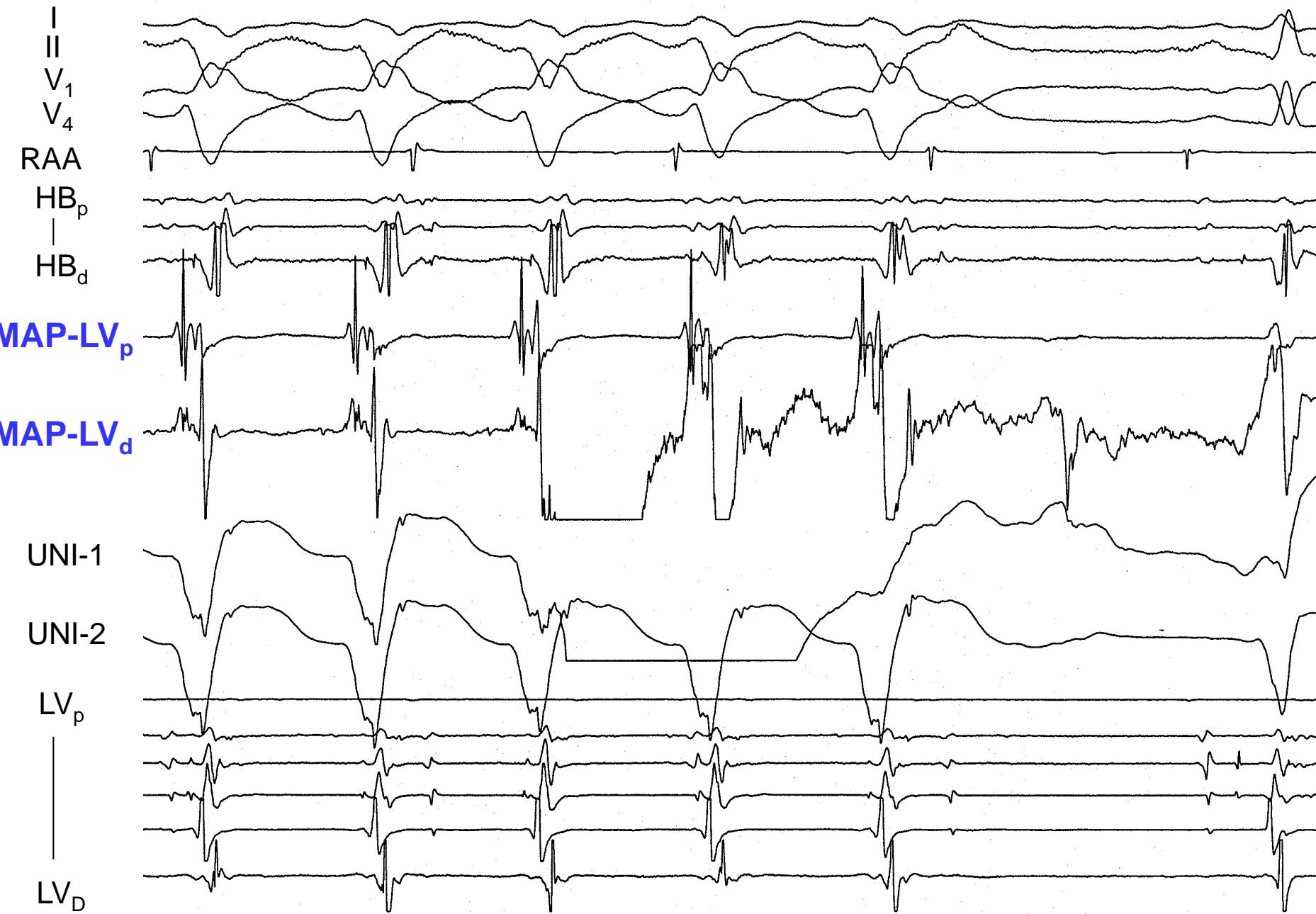
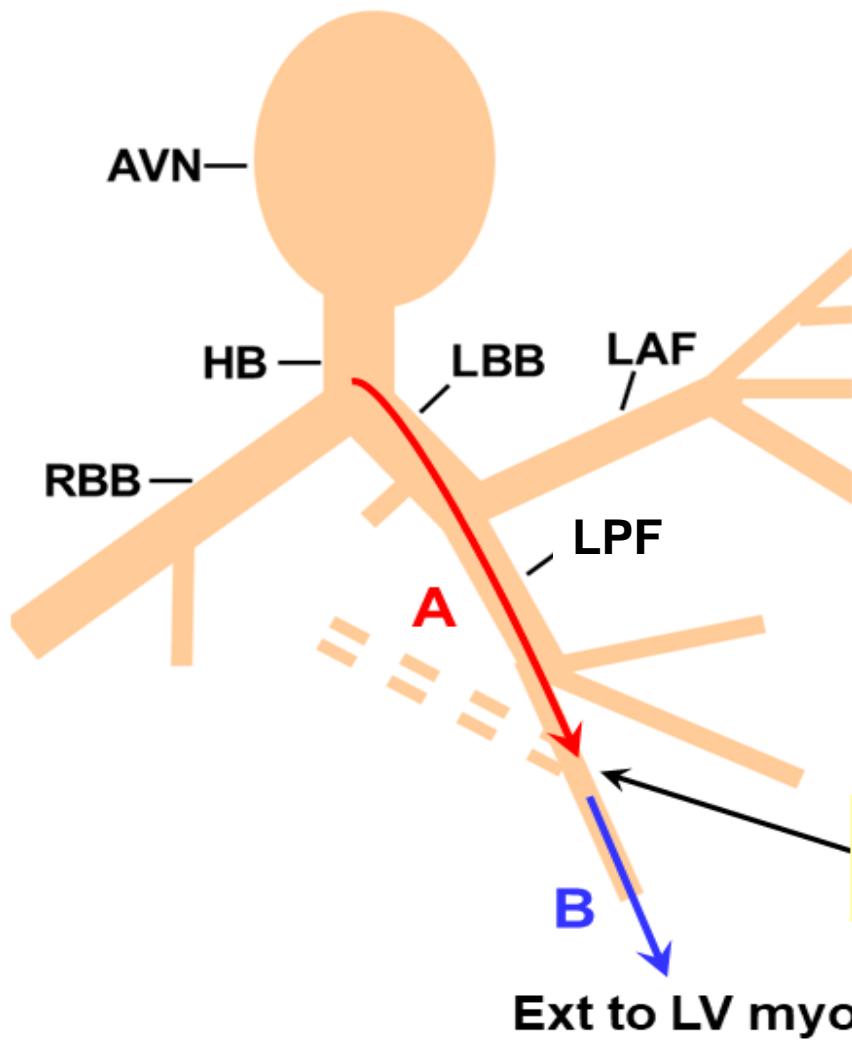


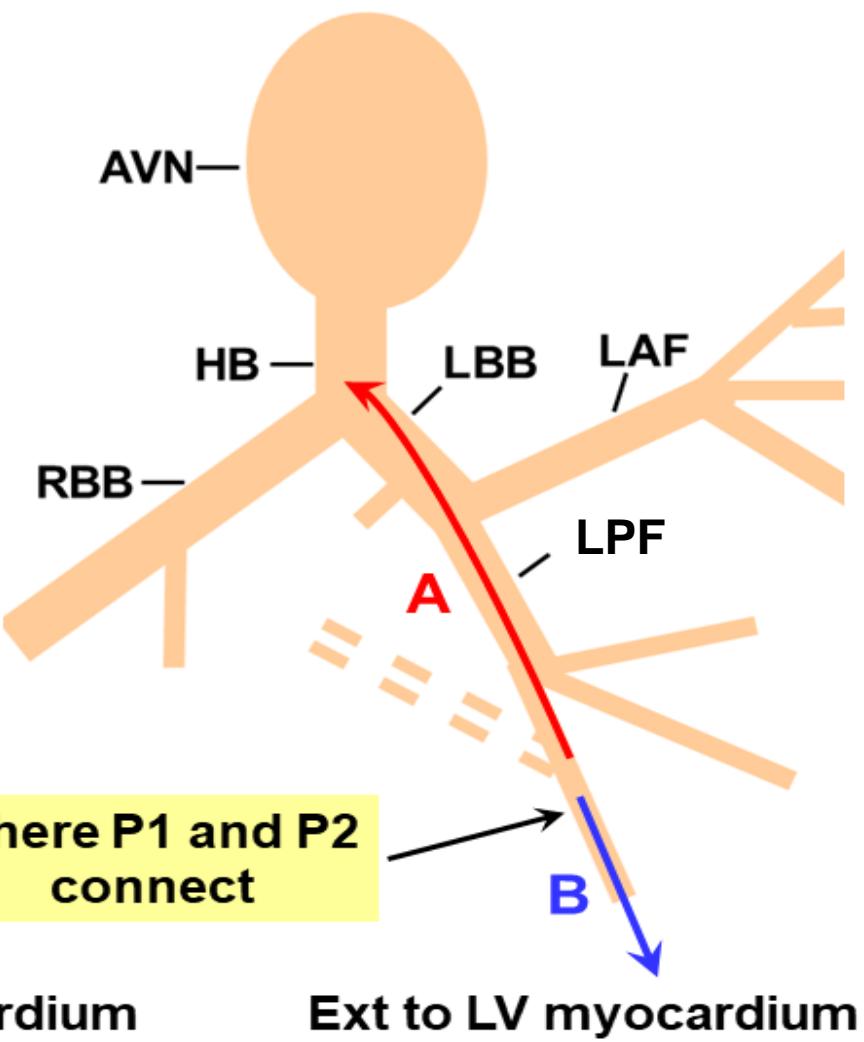
Figure 11.18D.

200 ms

Sinus Rhythm
 $HV = B + A$



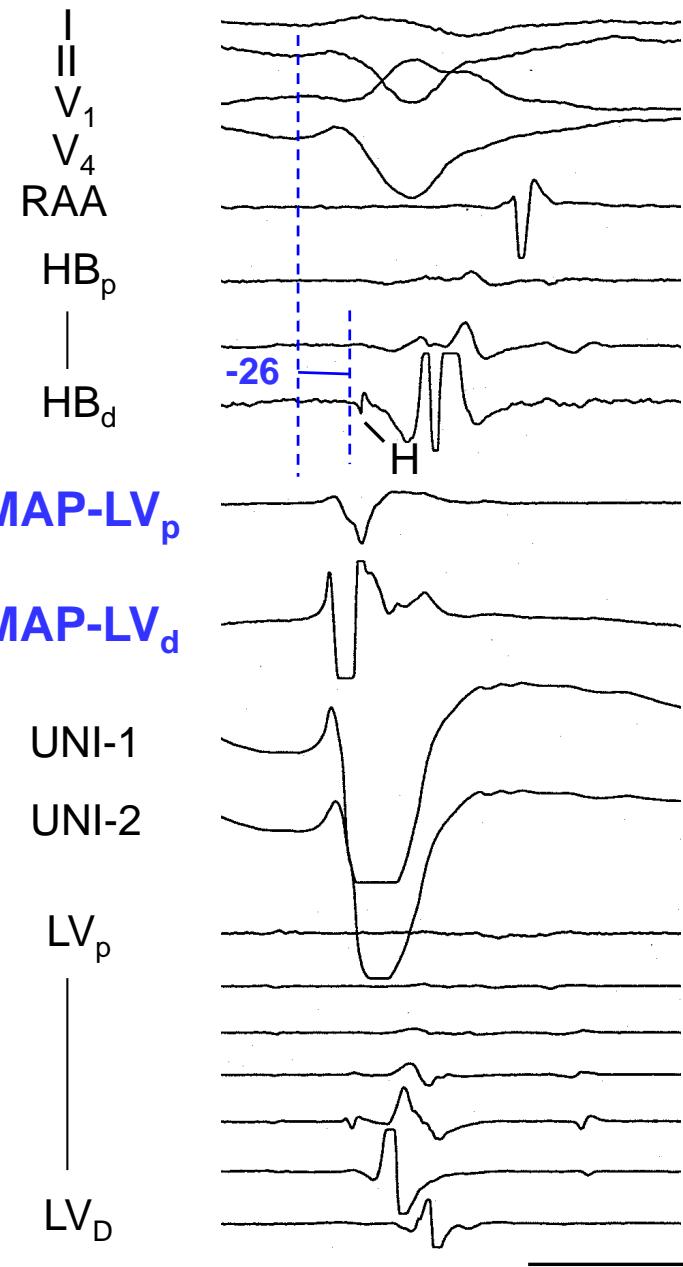
Ventricular Tachycardia
 $HV = B - A$



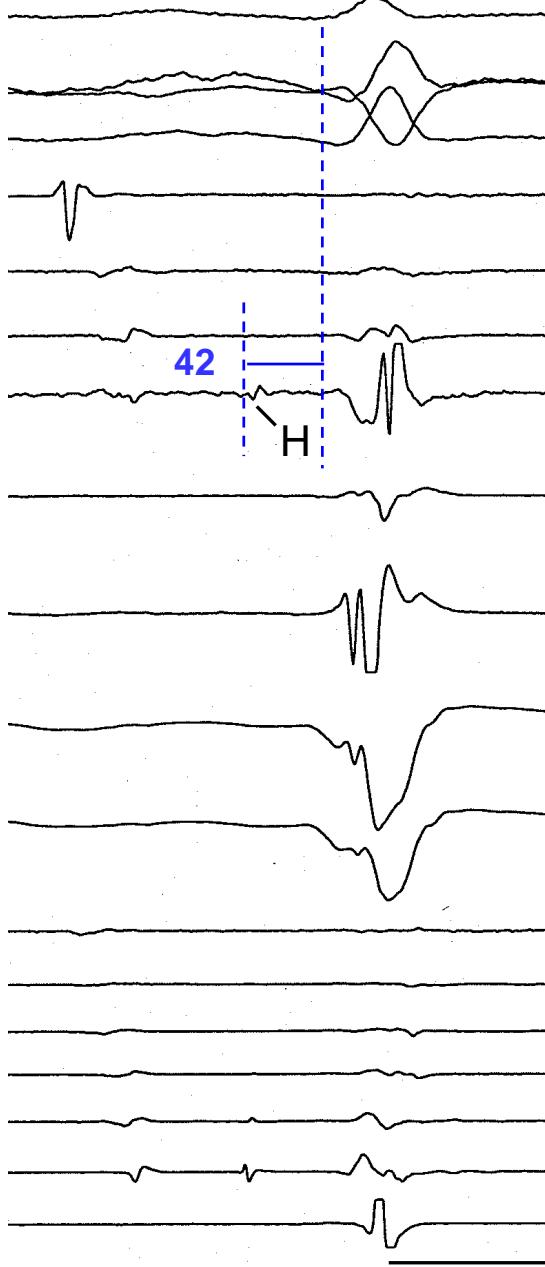
$$2 \times B = HV \text{ in sinus rhythm} + HV \text{ in VT}$$

Figure 11.19.

VT: HV= -26 ms



SR: HV= 43 ms



SR: P-V= 11 ms

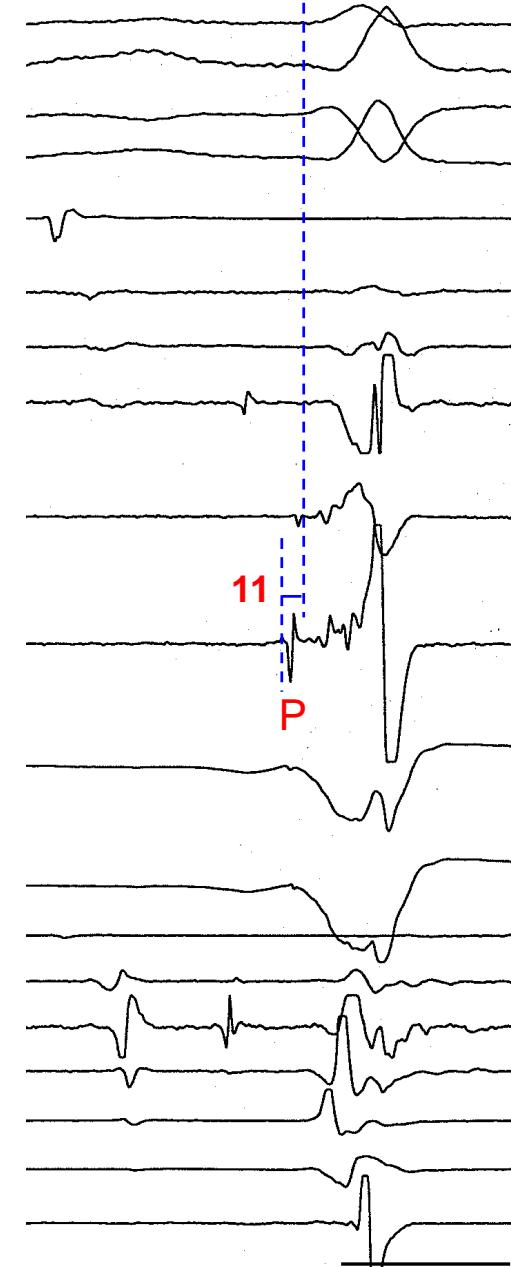


Figure 11.19B

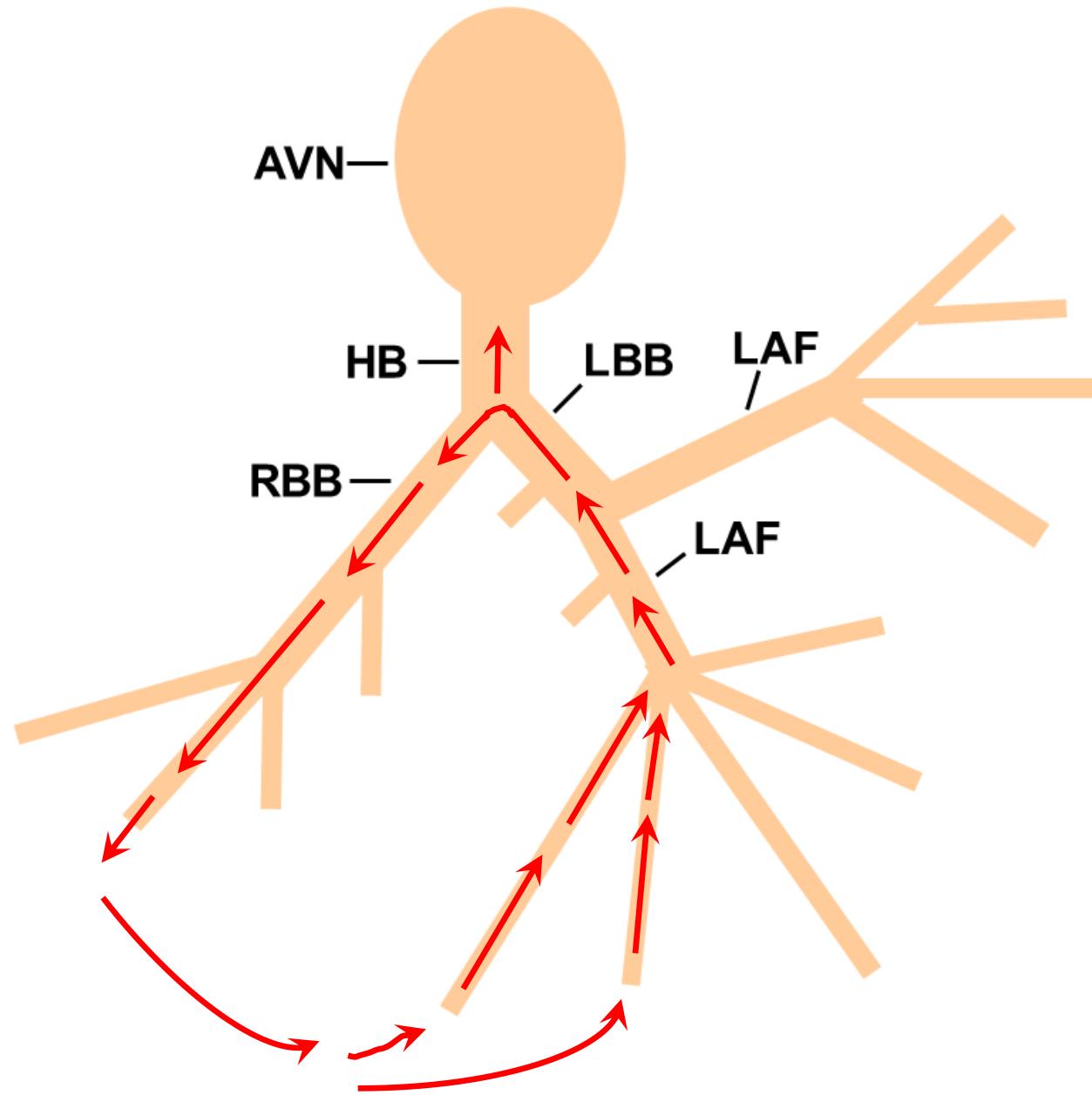


Figure 11.20A.

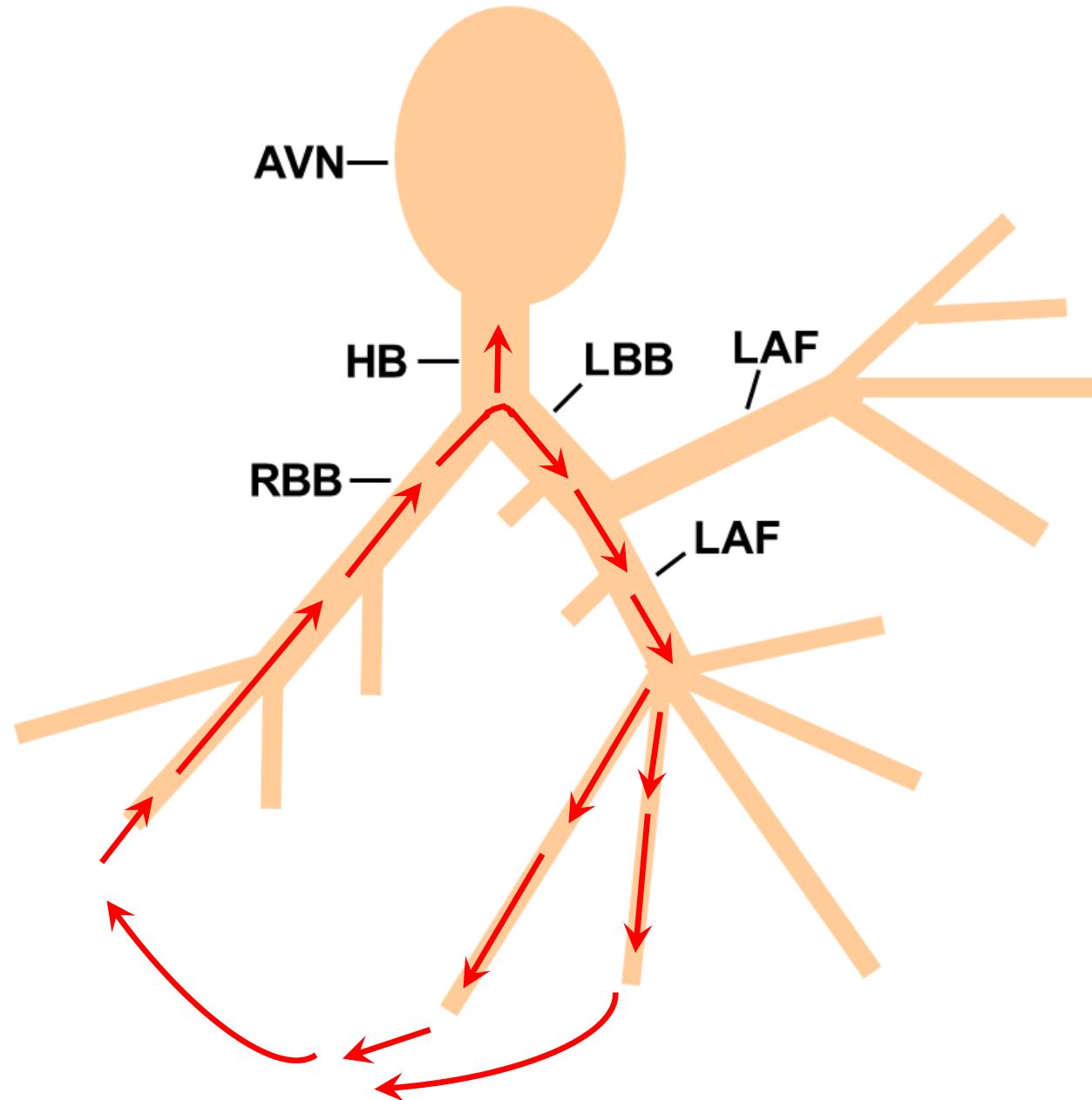


Figure 11.20B.

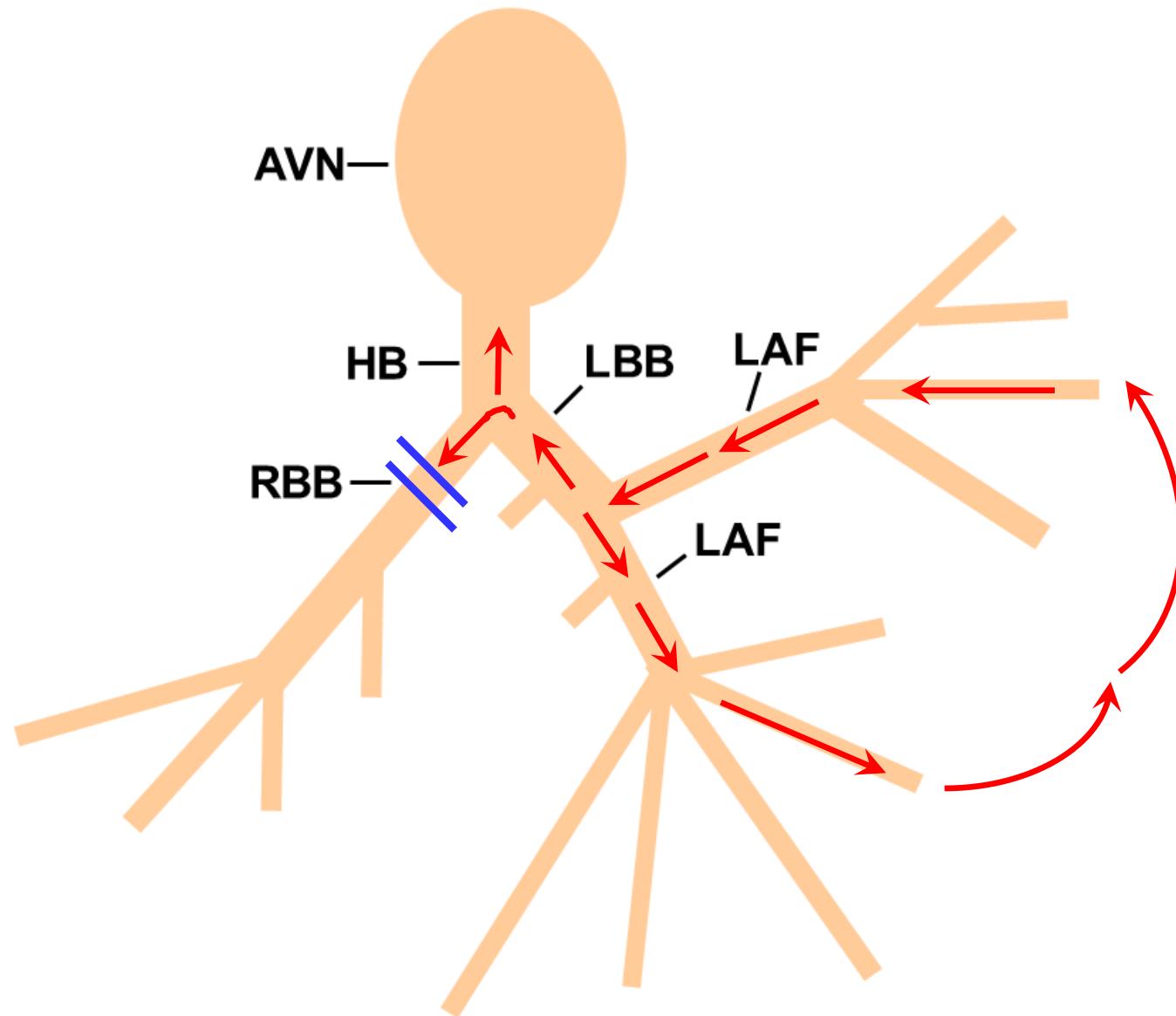


Figure 11.20C.

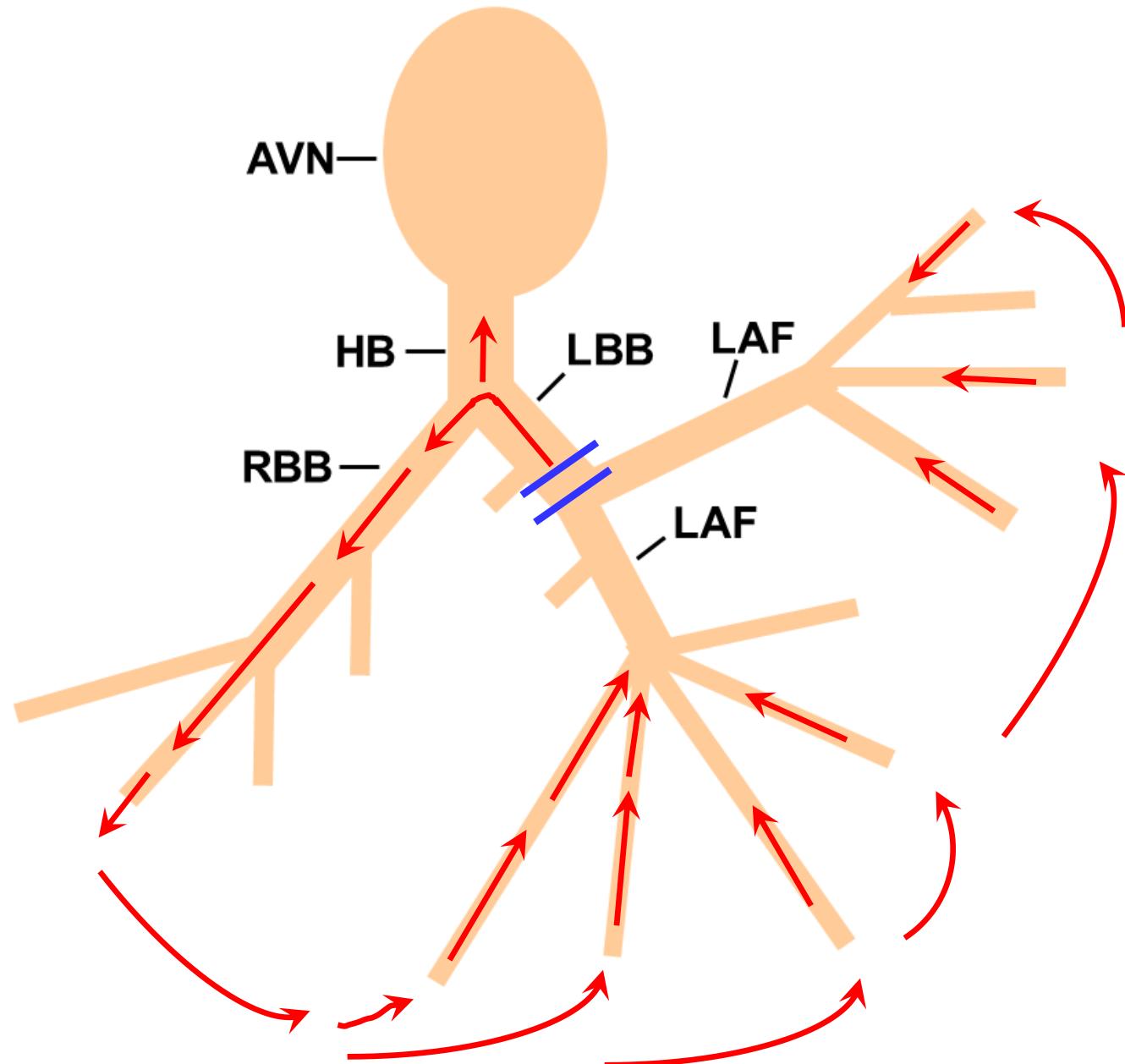


Figure 11.20D.

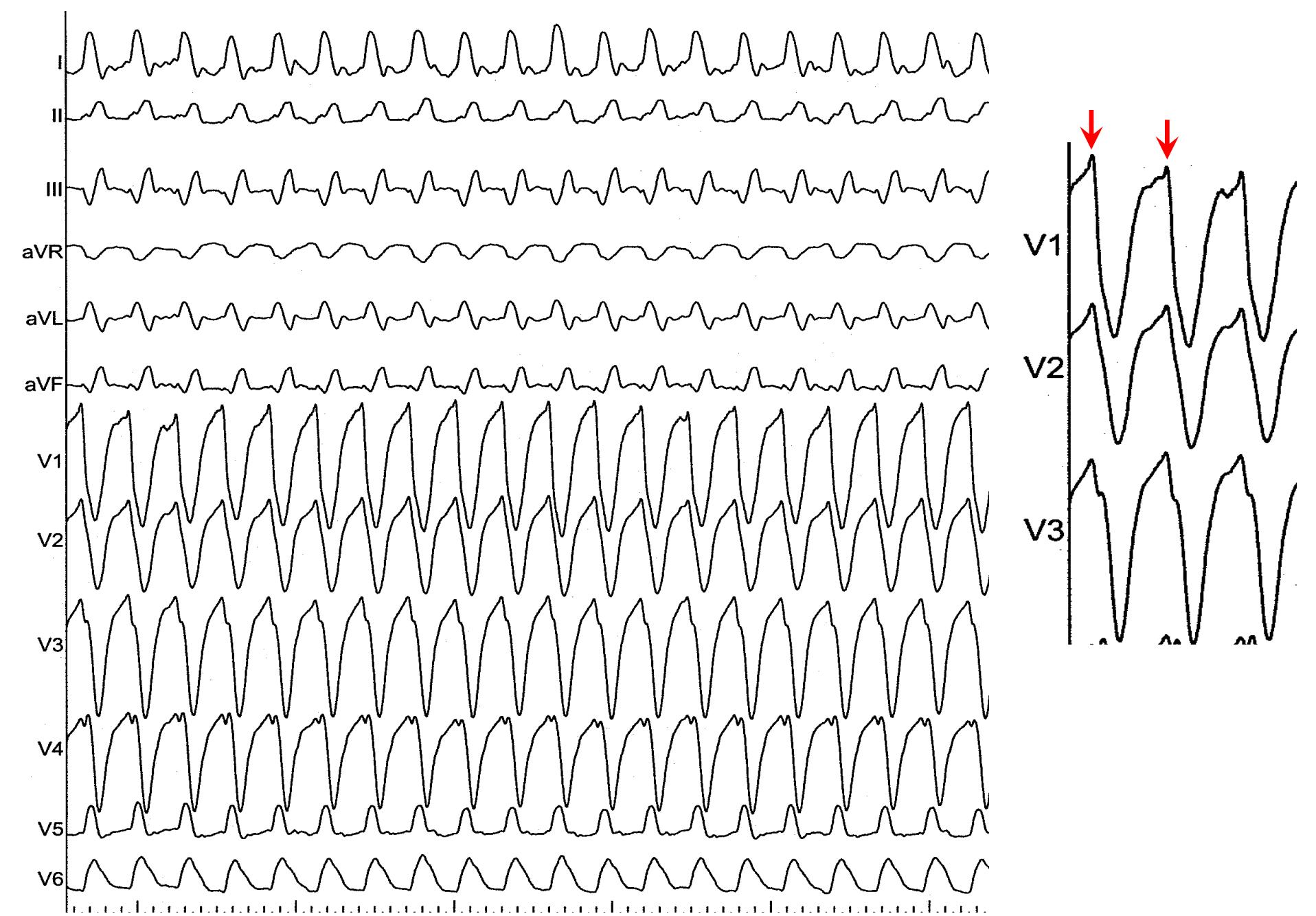


Figure 11.21.A

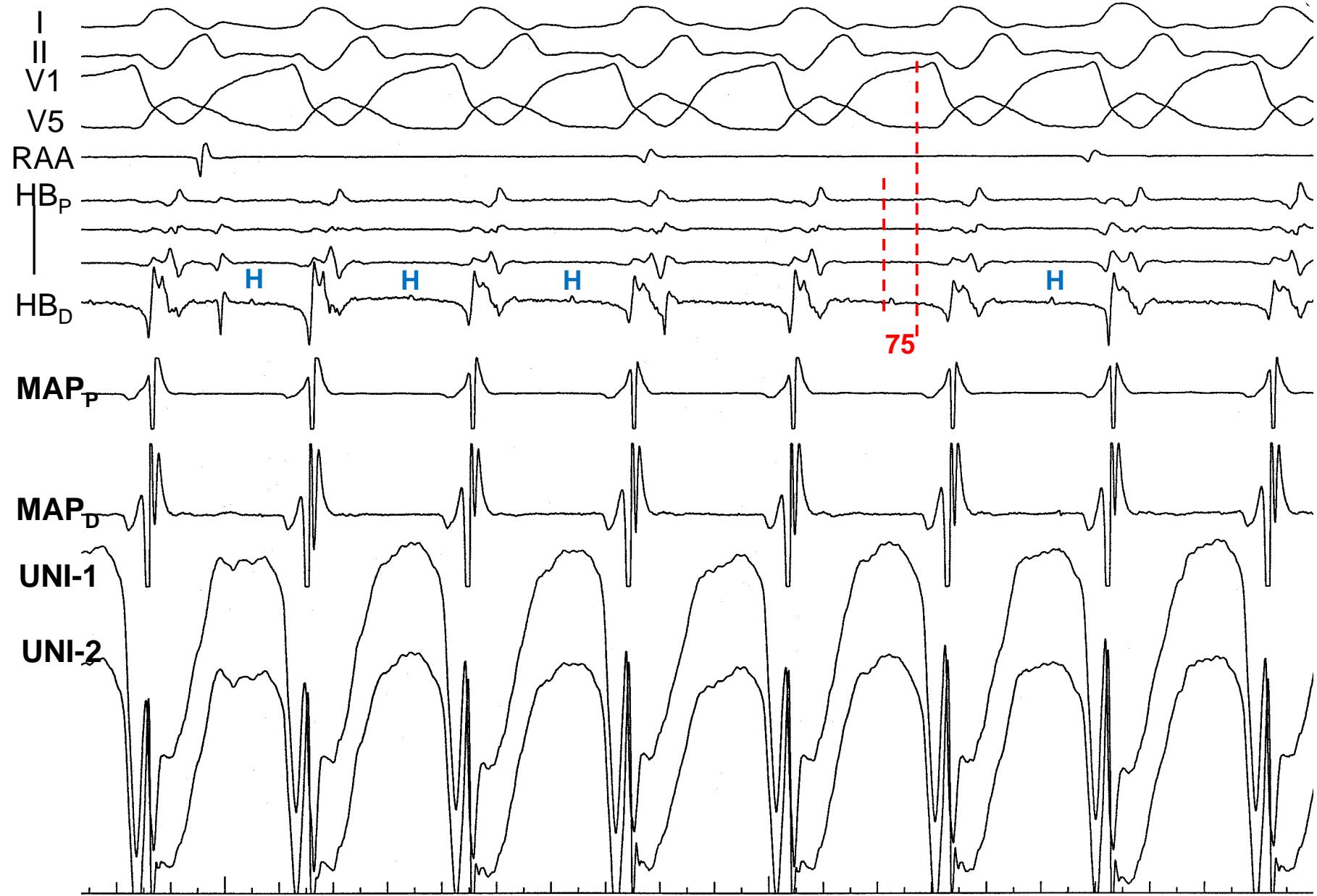


Figure 11.21.B

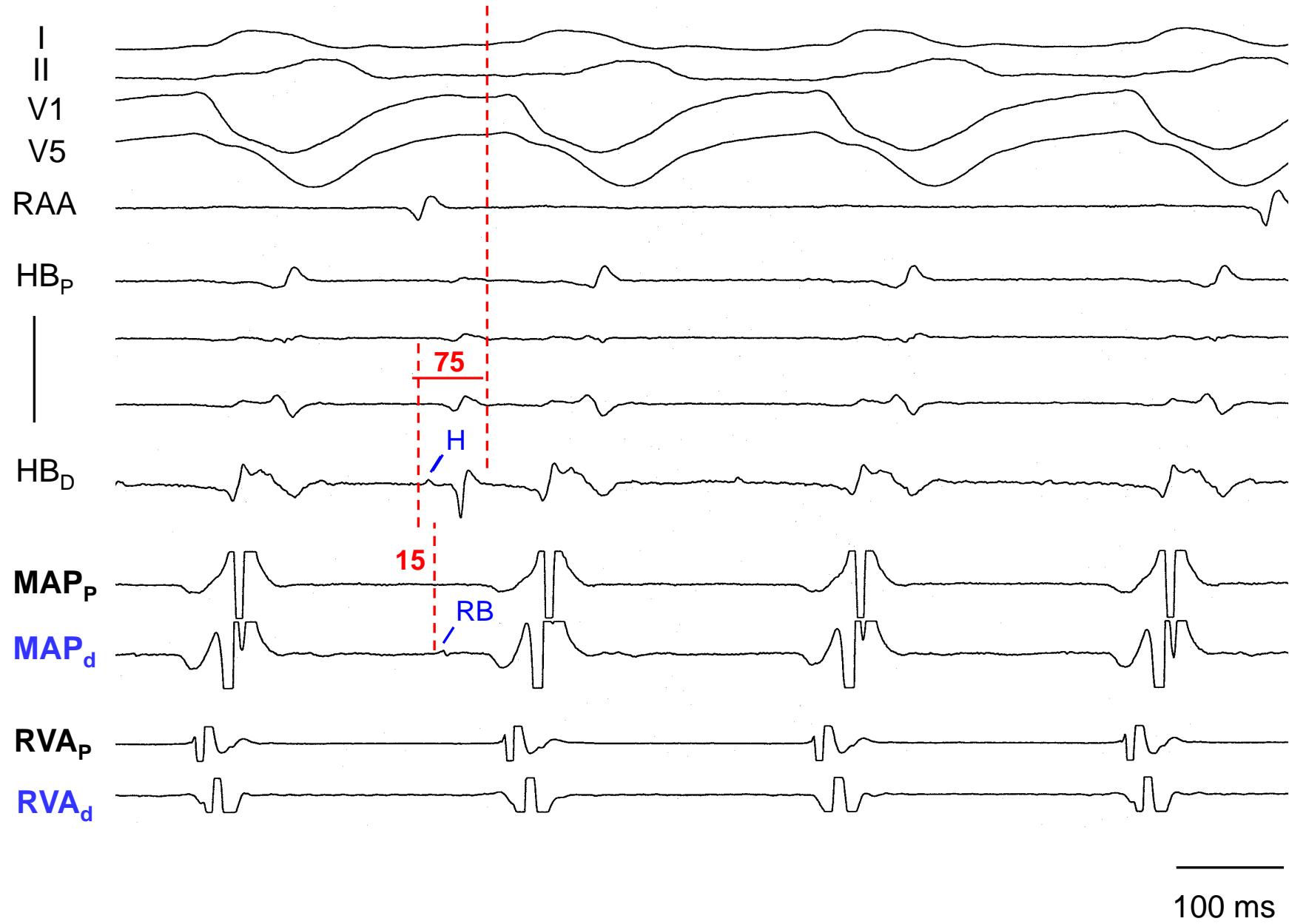


Figure 11.21.C

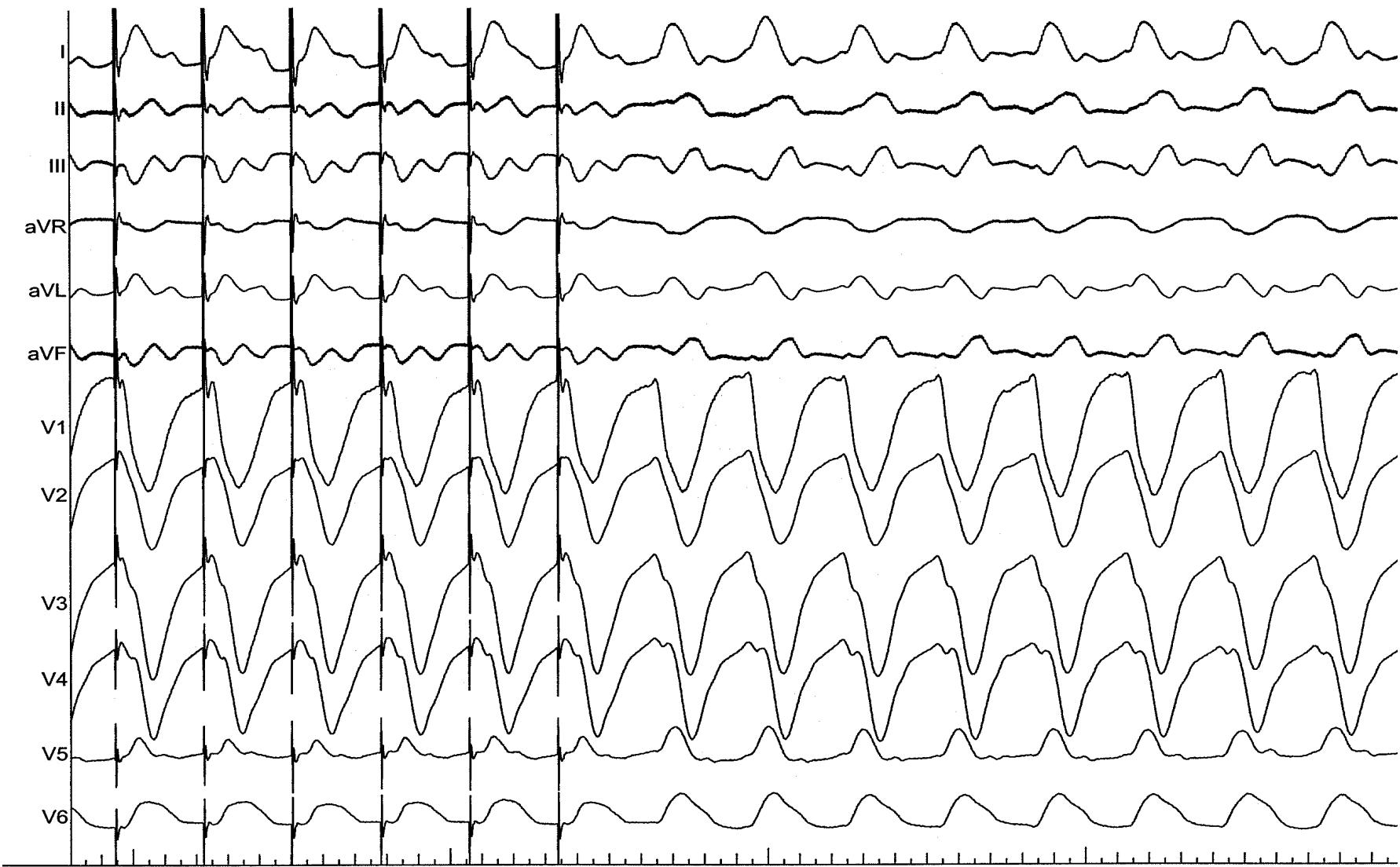


Figure 11.21.D

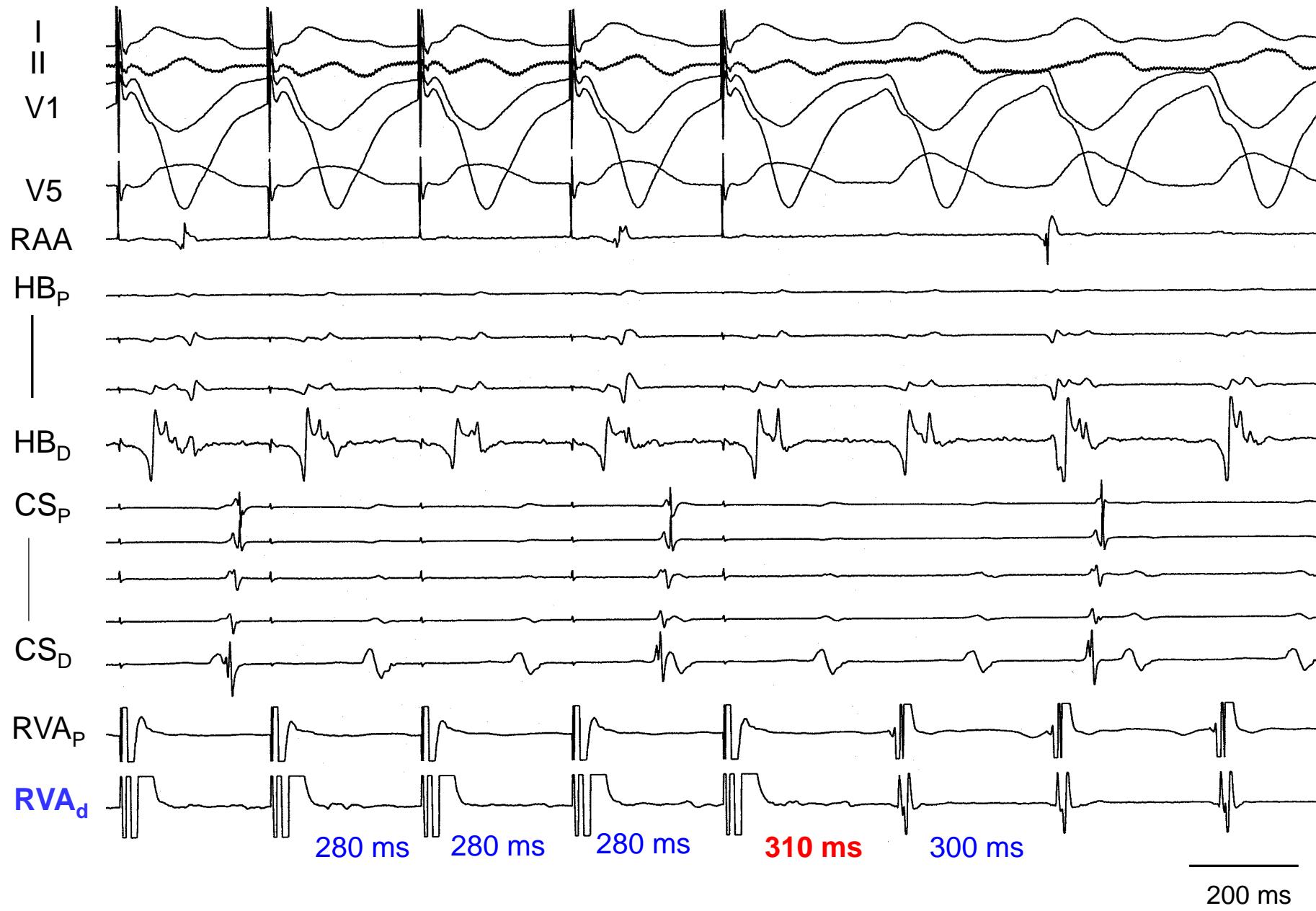


Figure 11.21.E

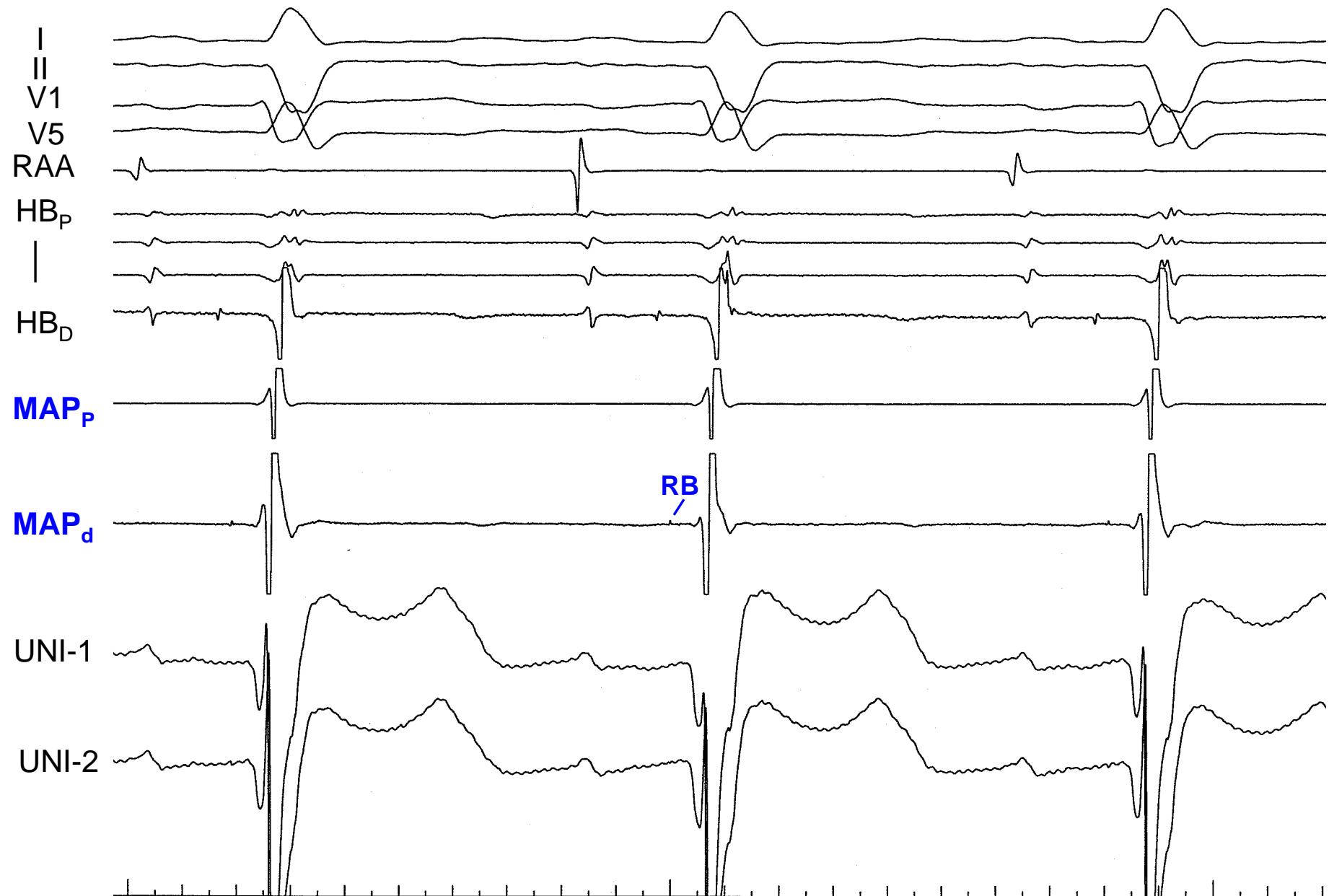


Figure 11.21.F

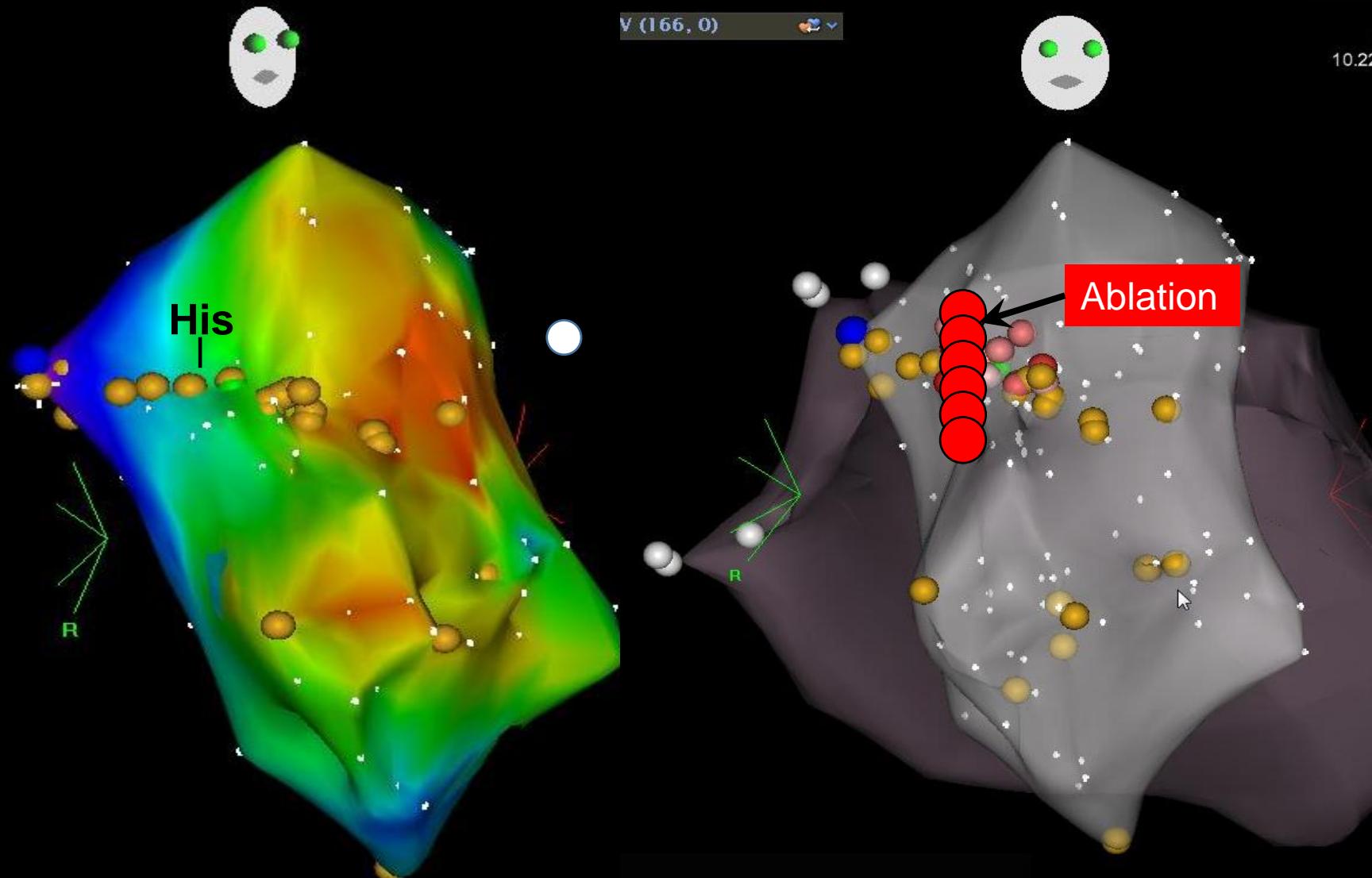
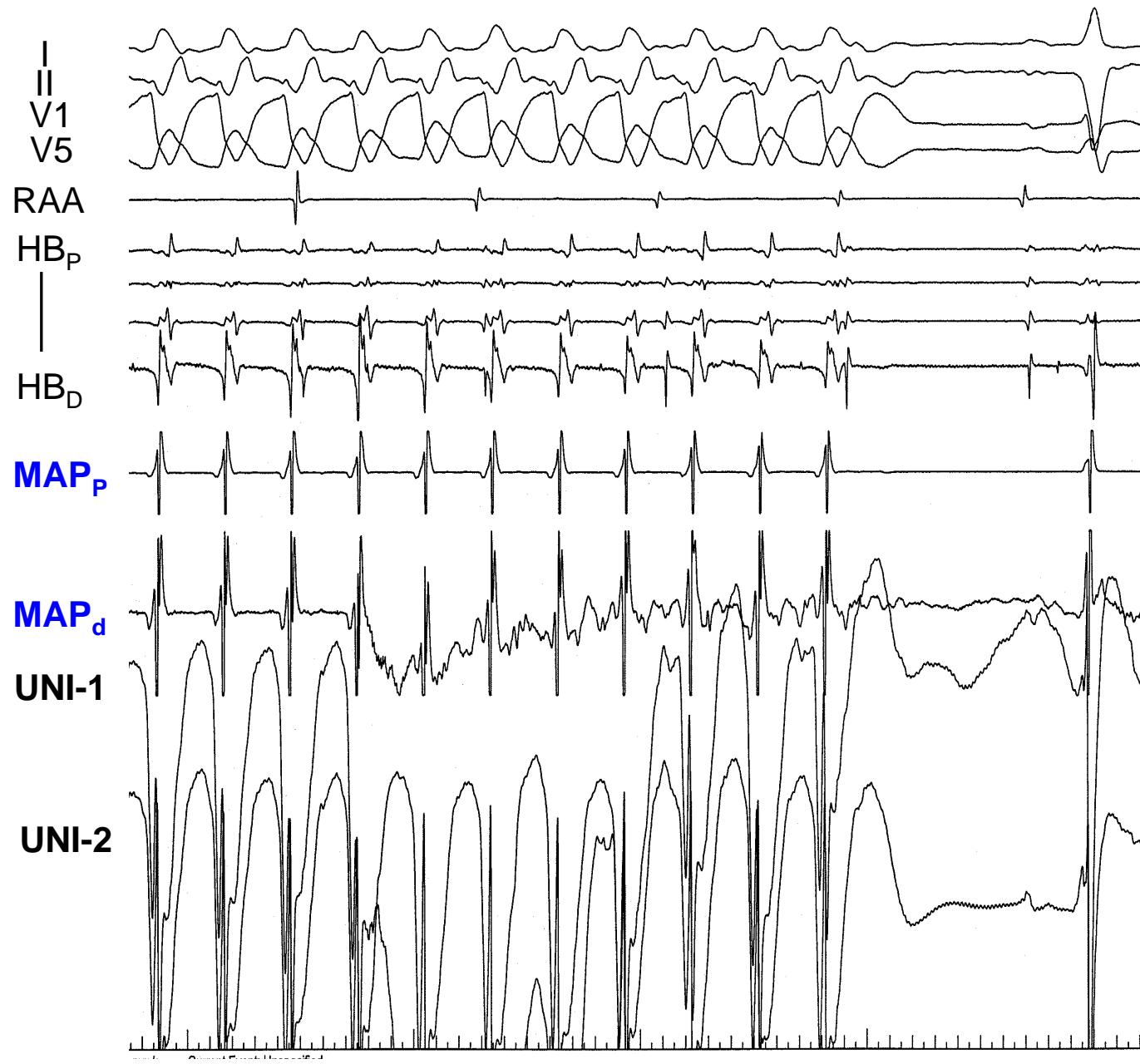


Figure 11.21G.



$HV = 85$

200 ms

Figure 11.21.H

II

V1

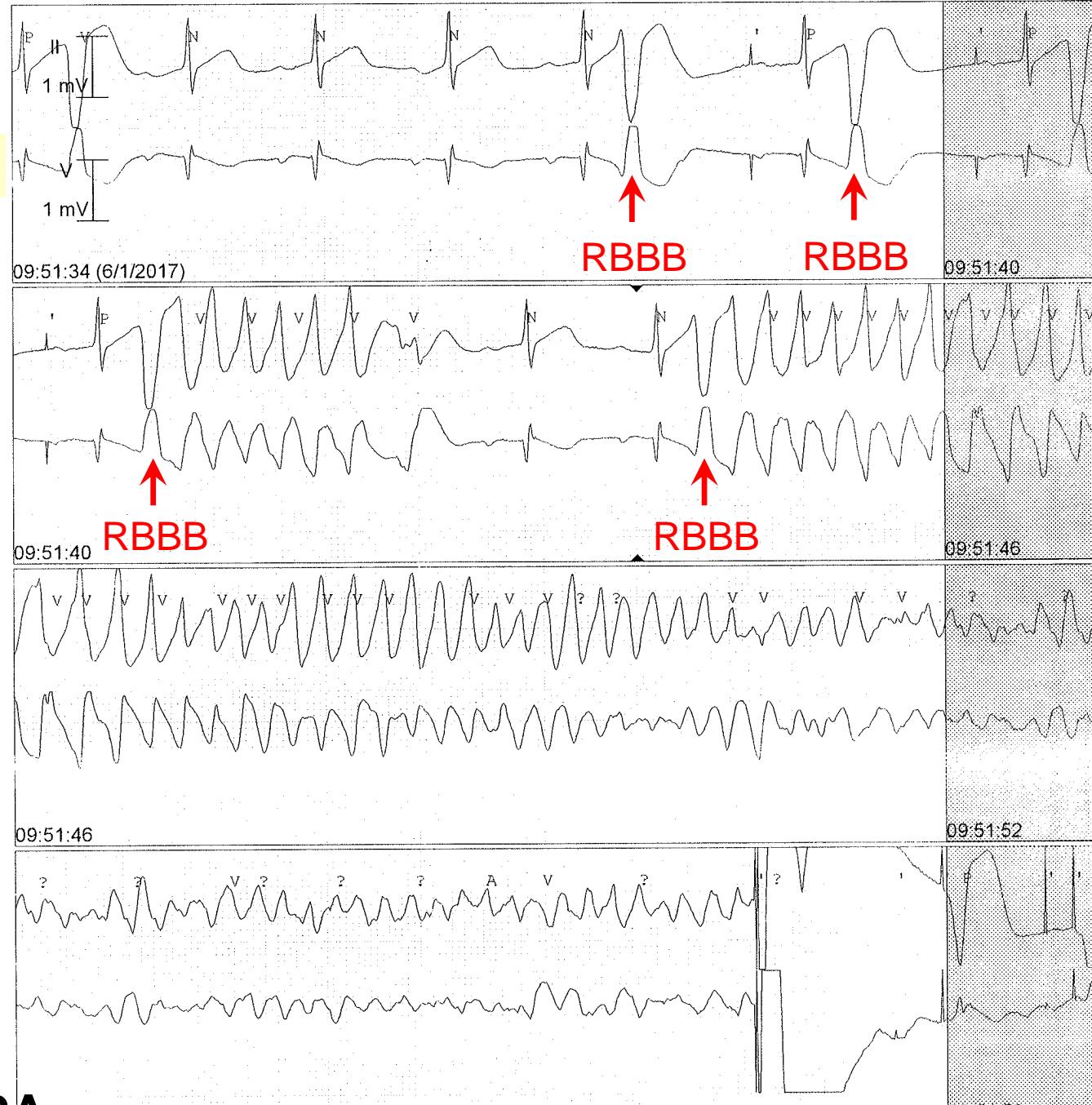


Figure 11.22A:

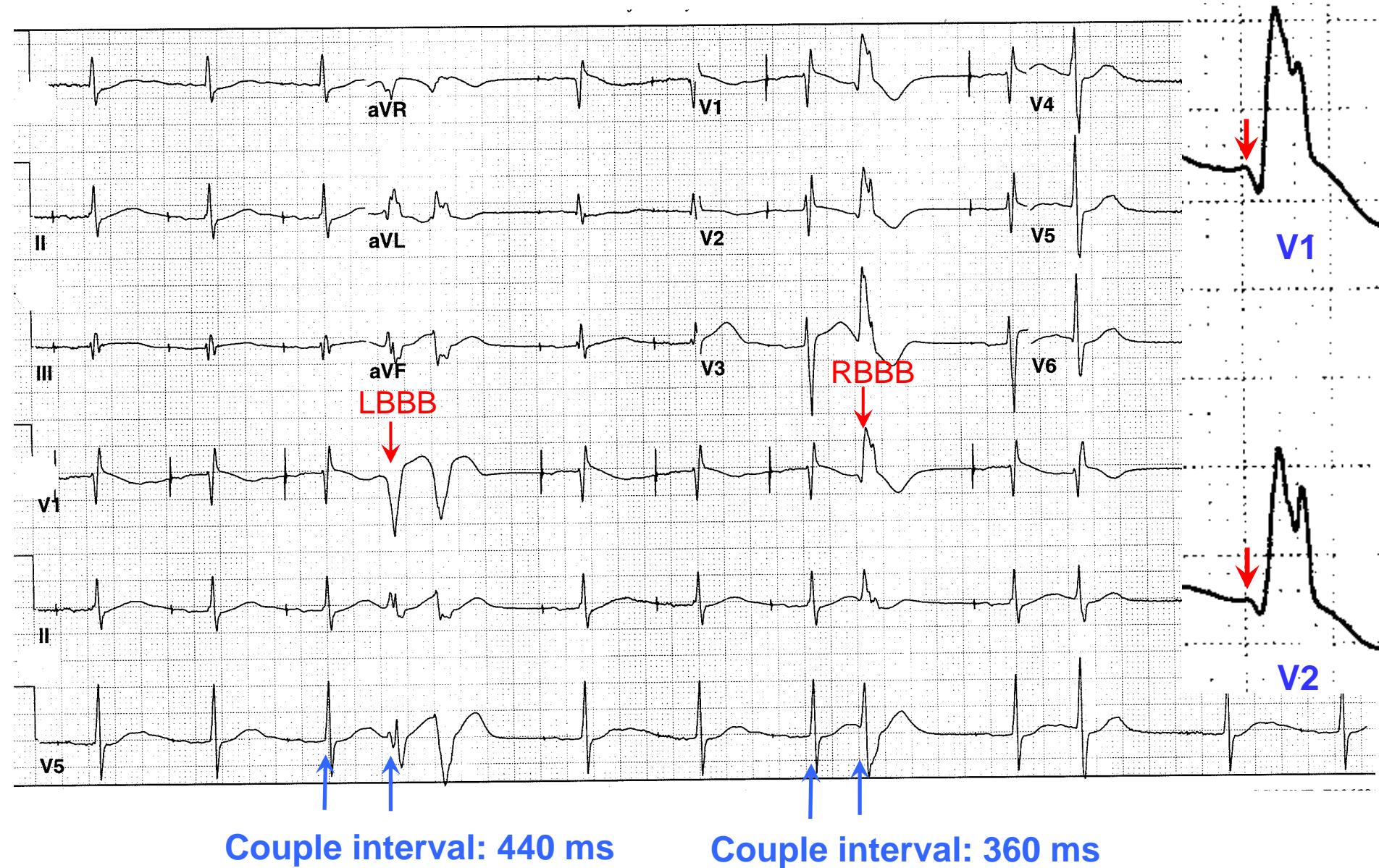


Figure 11.22B.

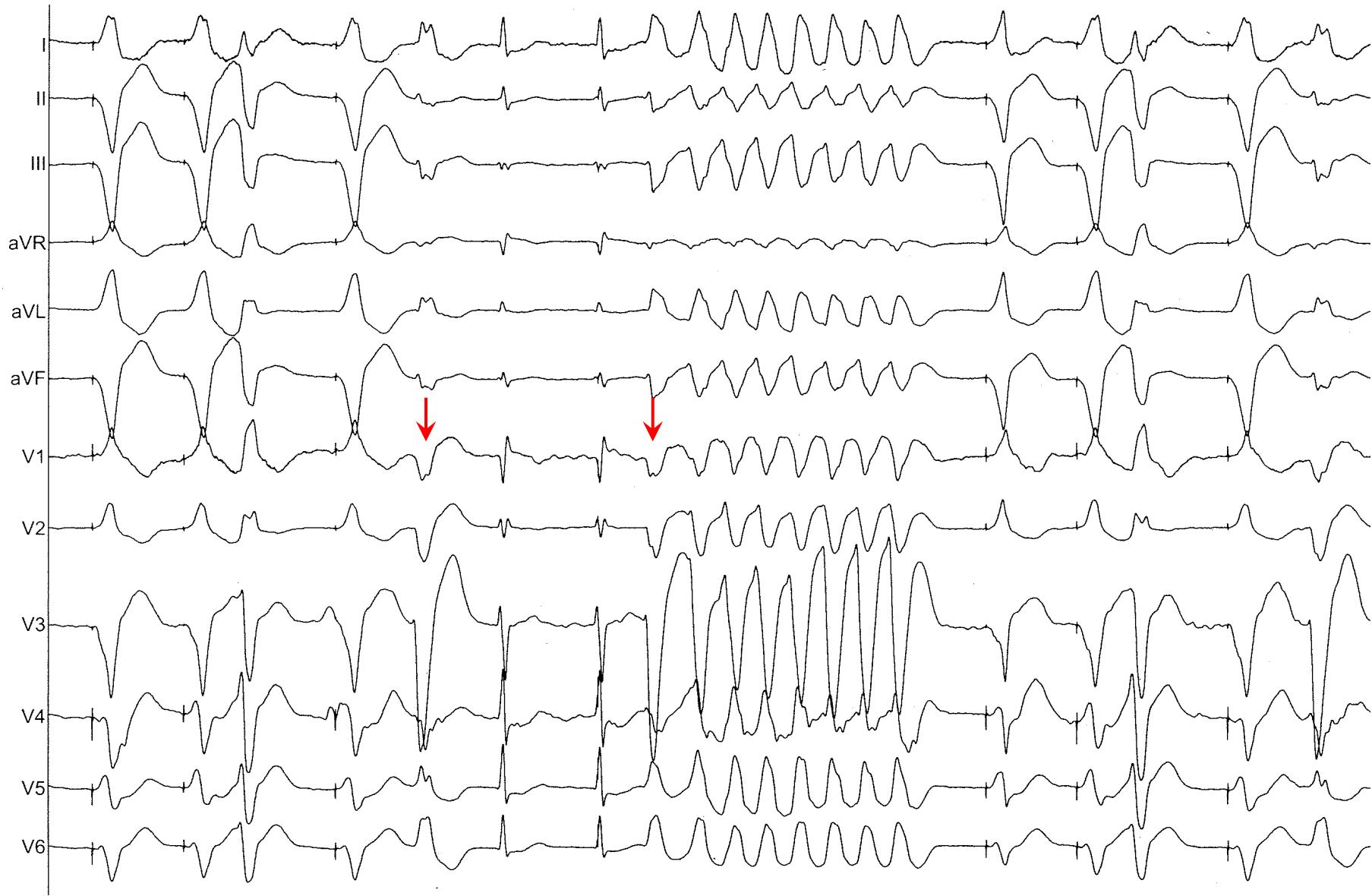


Figure 11.22C.

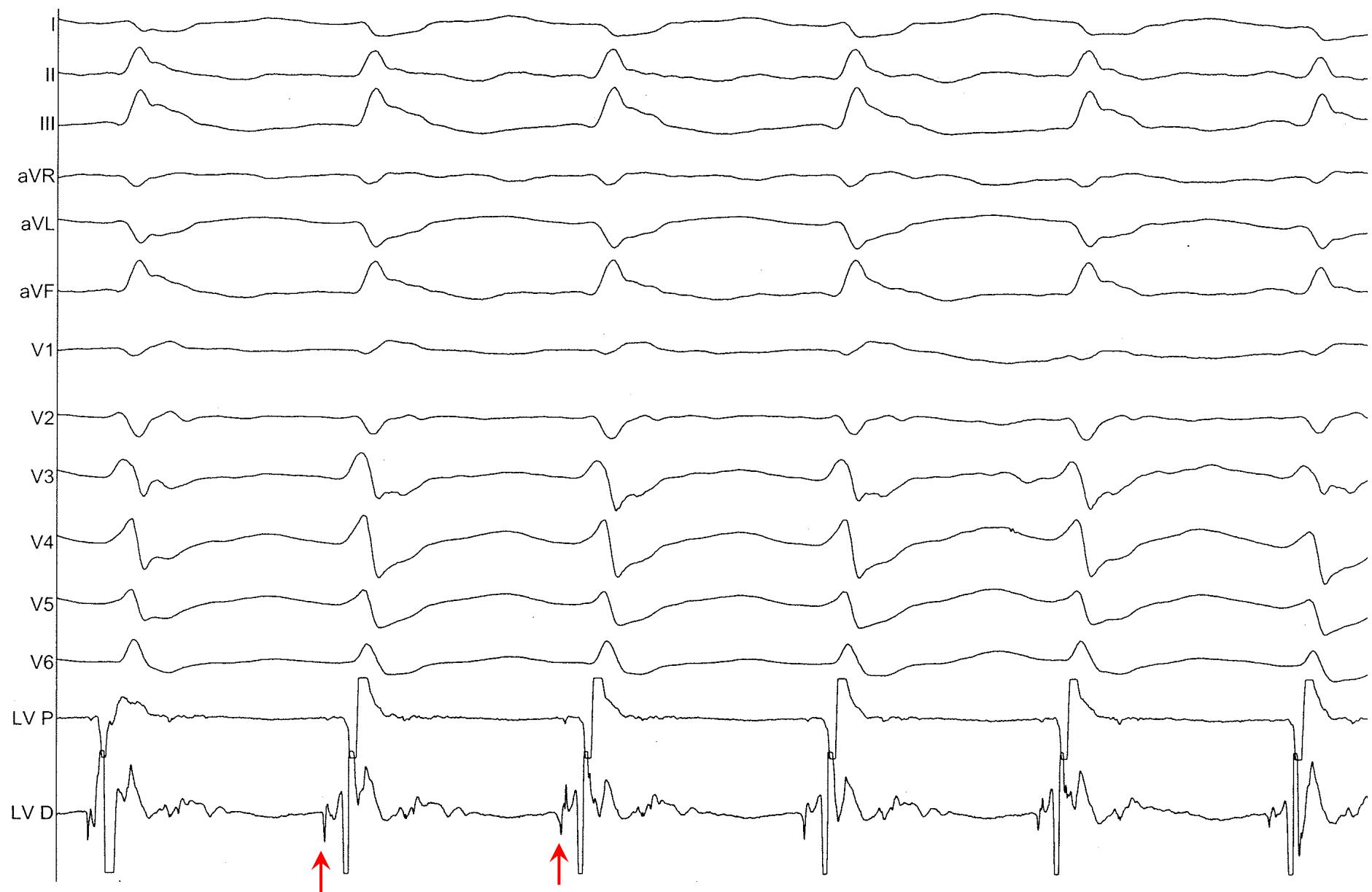


Figure 11.22D.

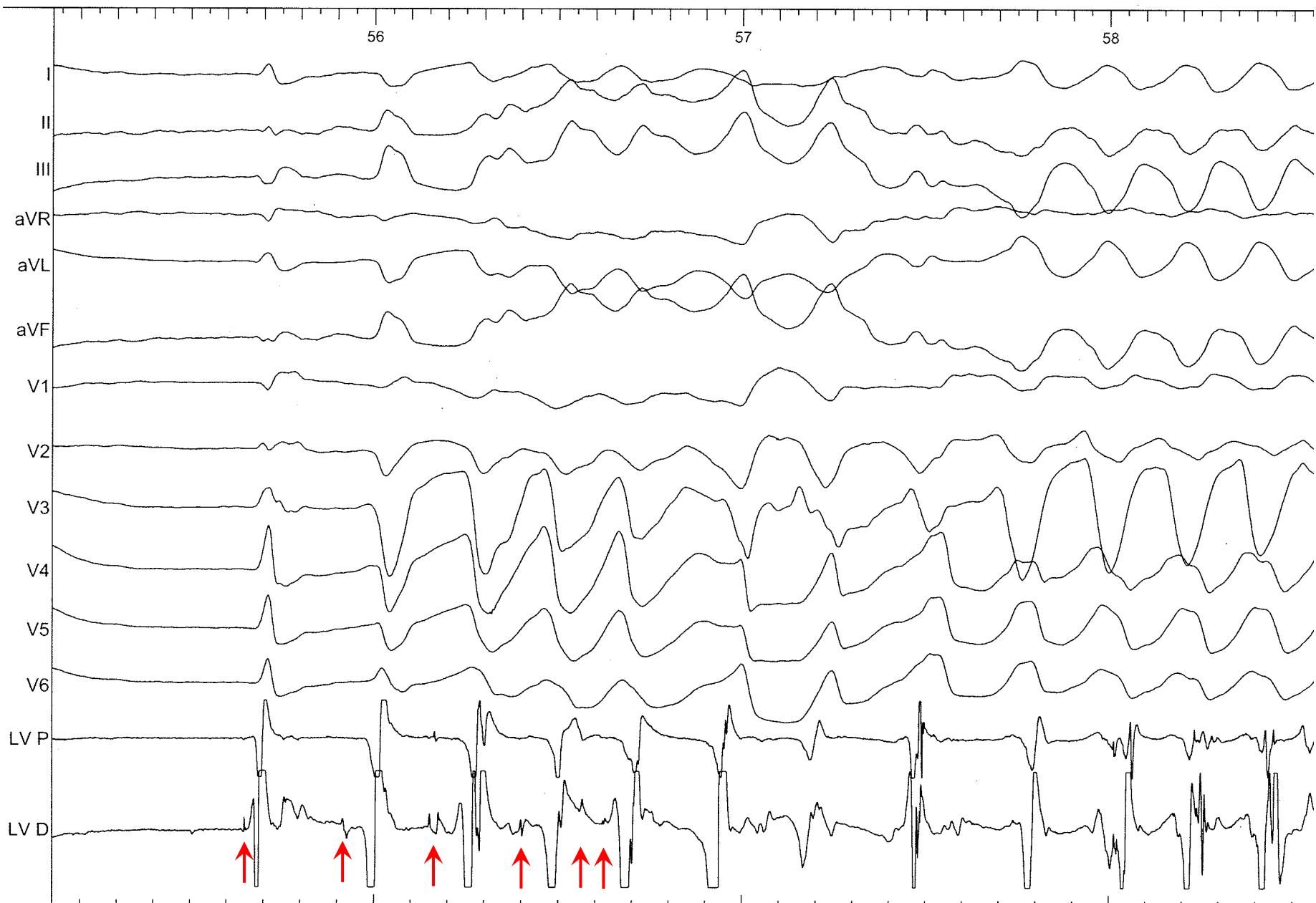


Figure 11.22E.

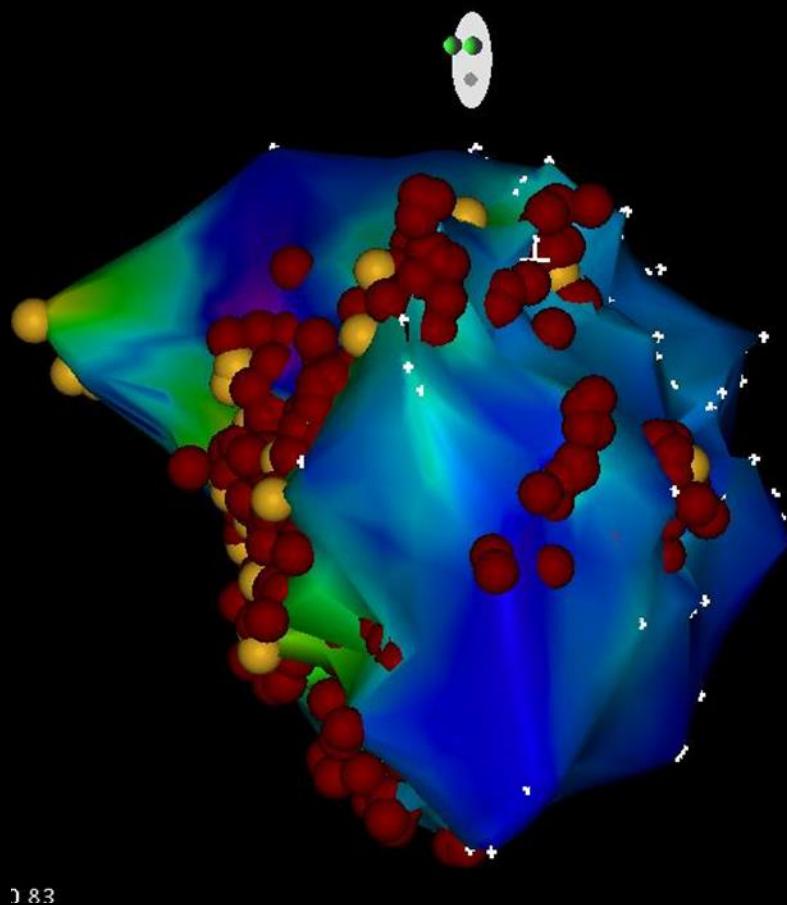
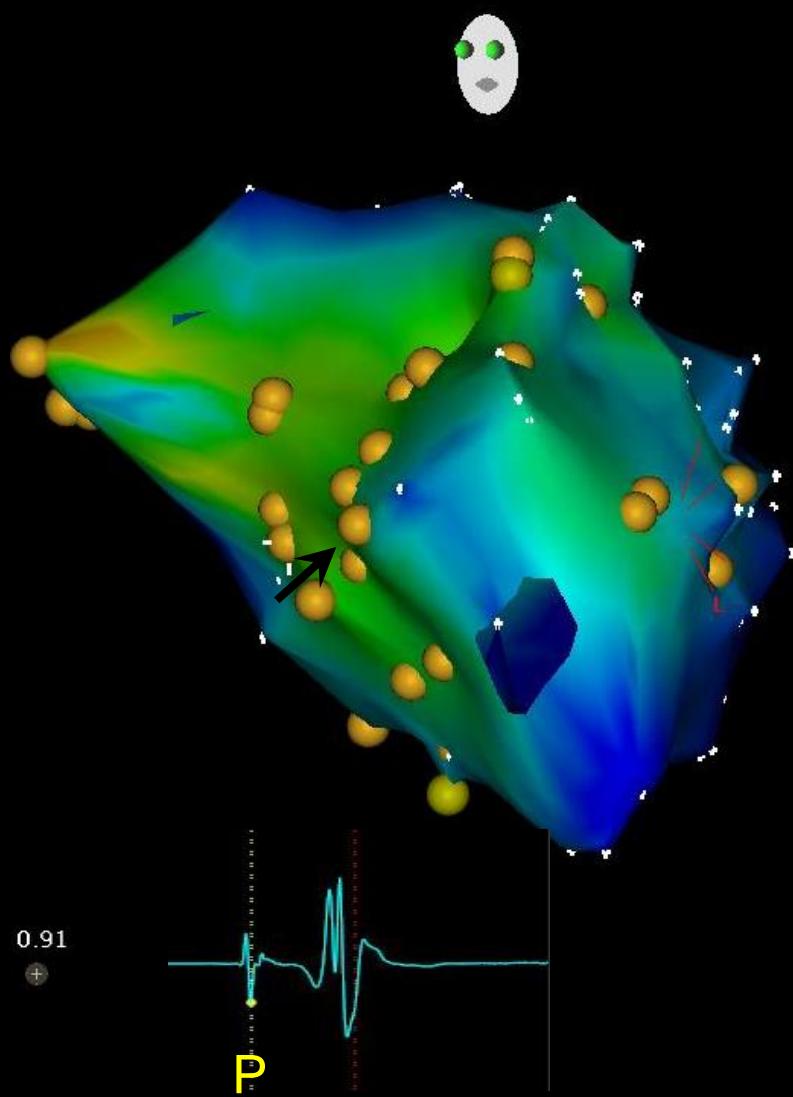


Figure 11.22F