
N N V N V N N N N V N V N N V
1 mV
1 mV
04:38:05 (1/30/2012)
04:38:10
N V N N V N V V V V V V V V
V V N
04:38:10
04:38:15

Figure 6.1A.

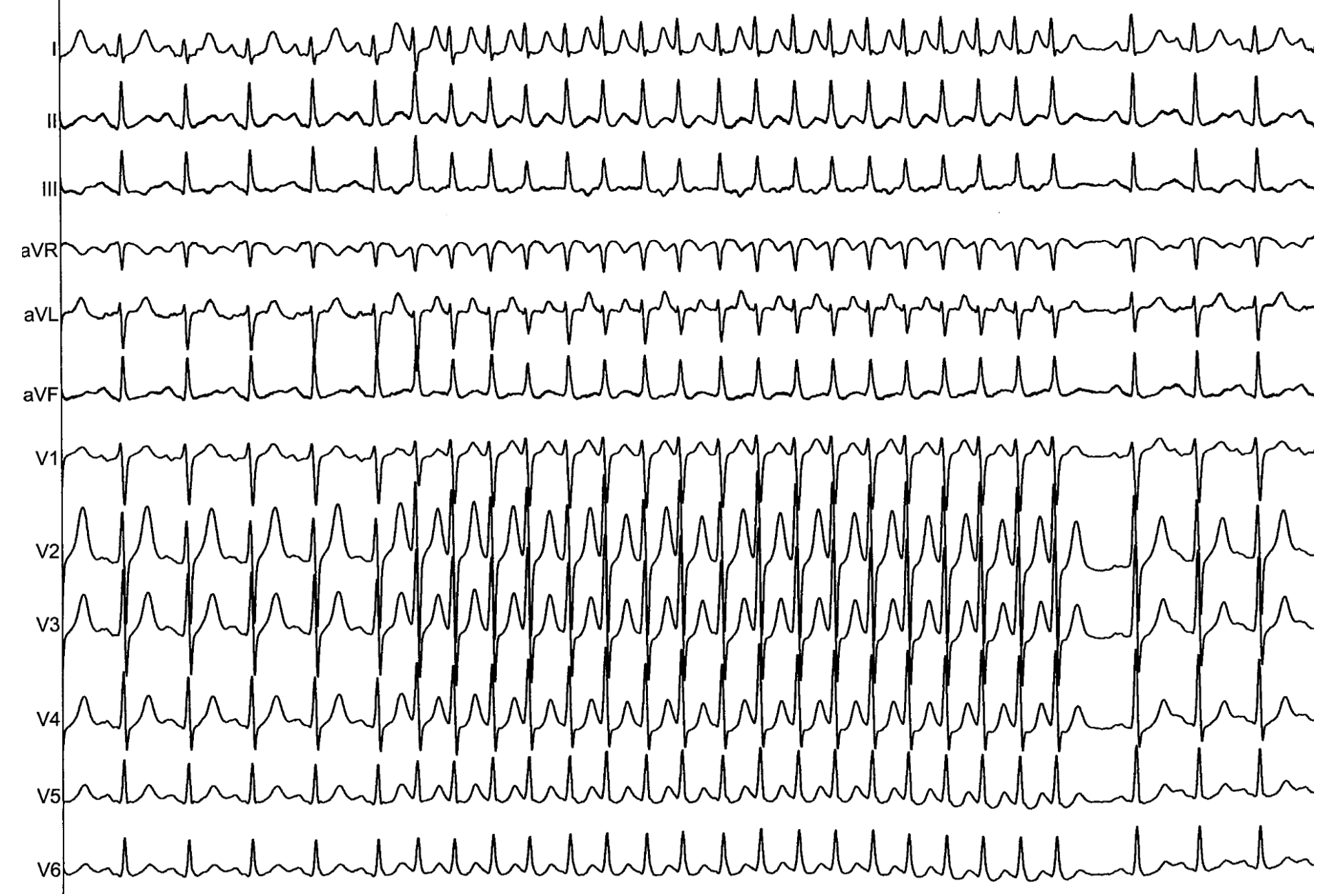


Figure 6.1B.

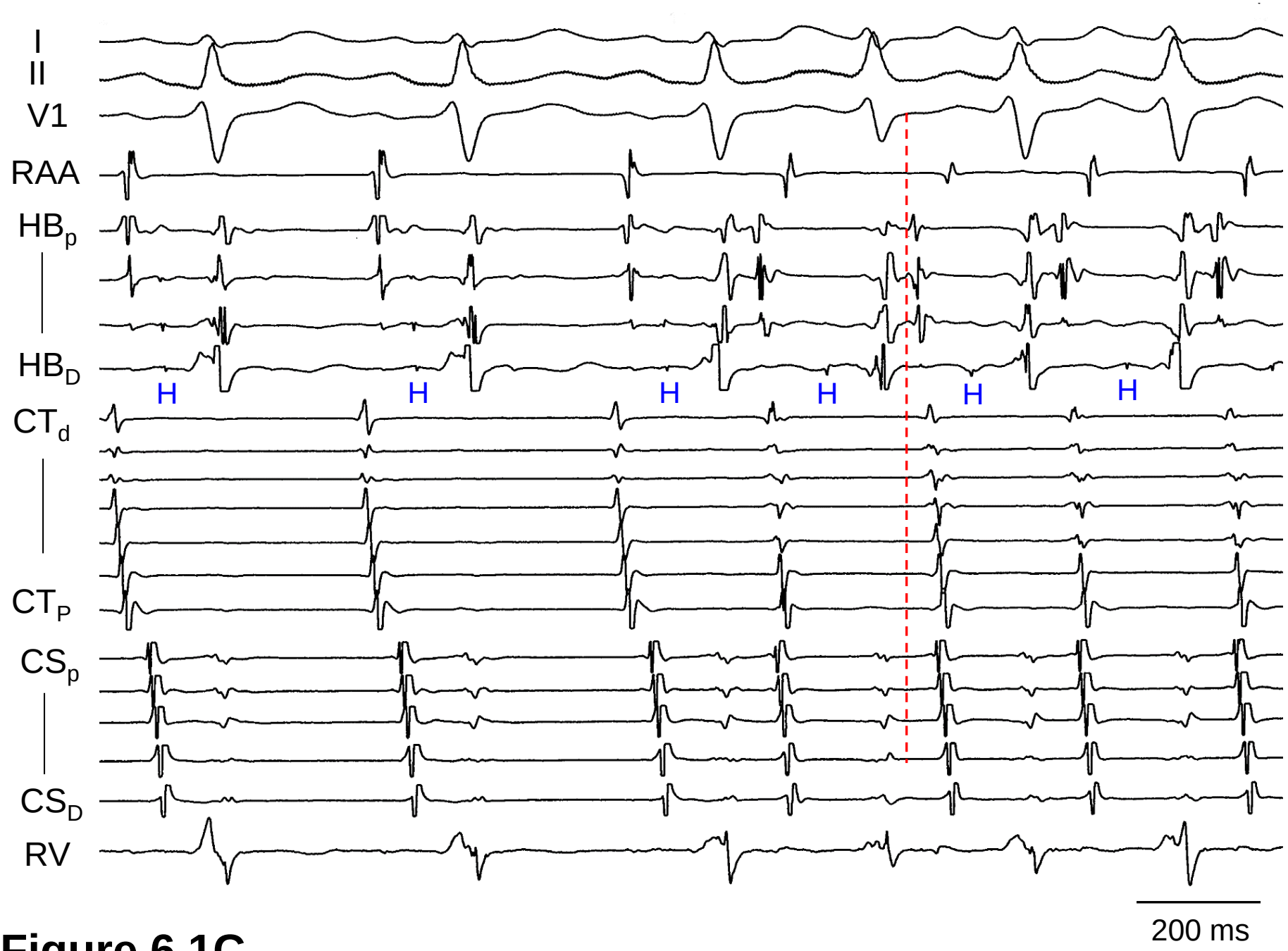


Figure 6.1C.

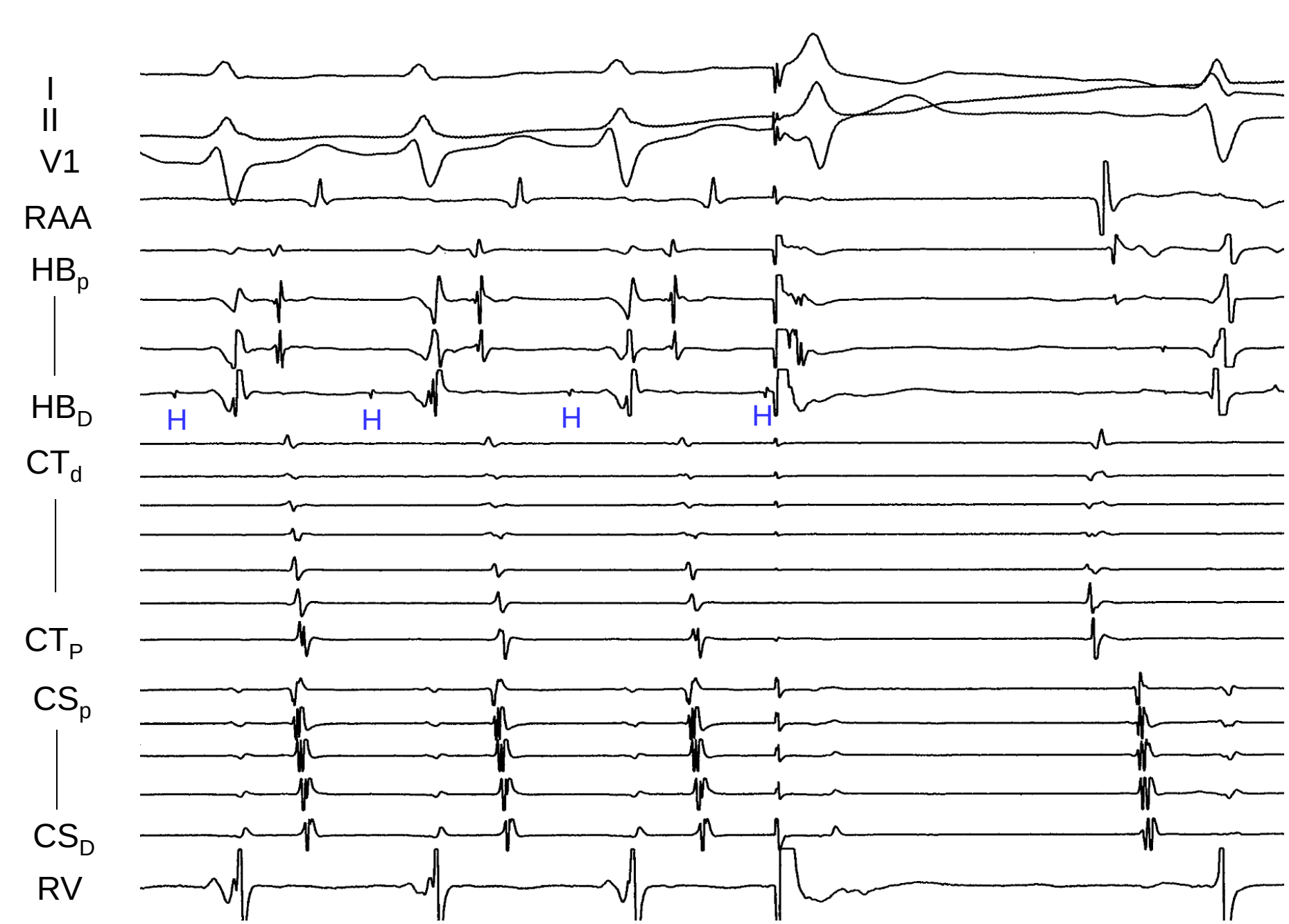


Figure 6.1D.

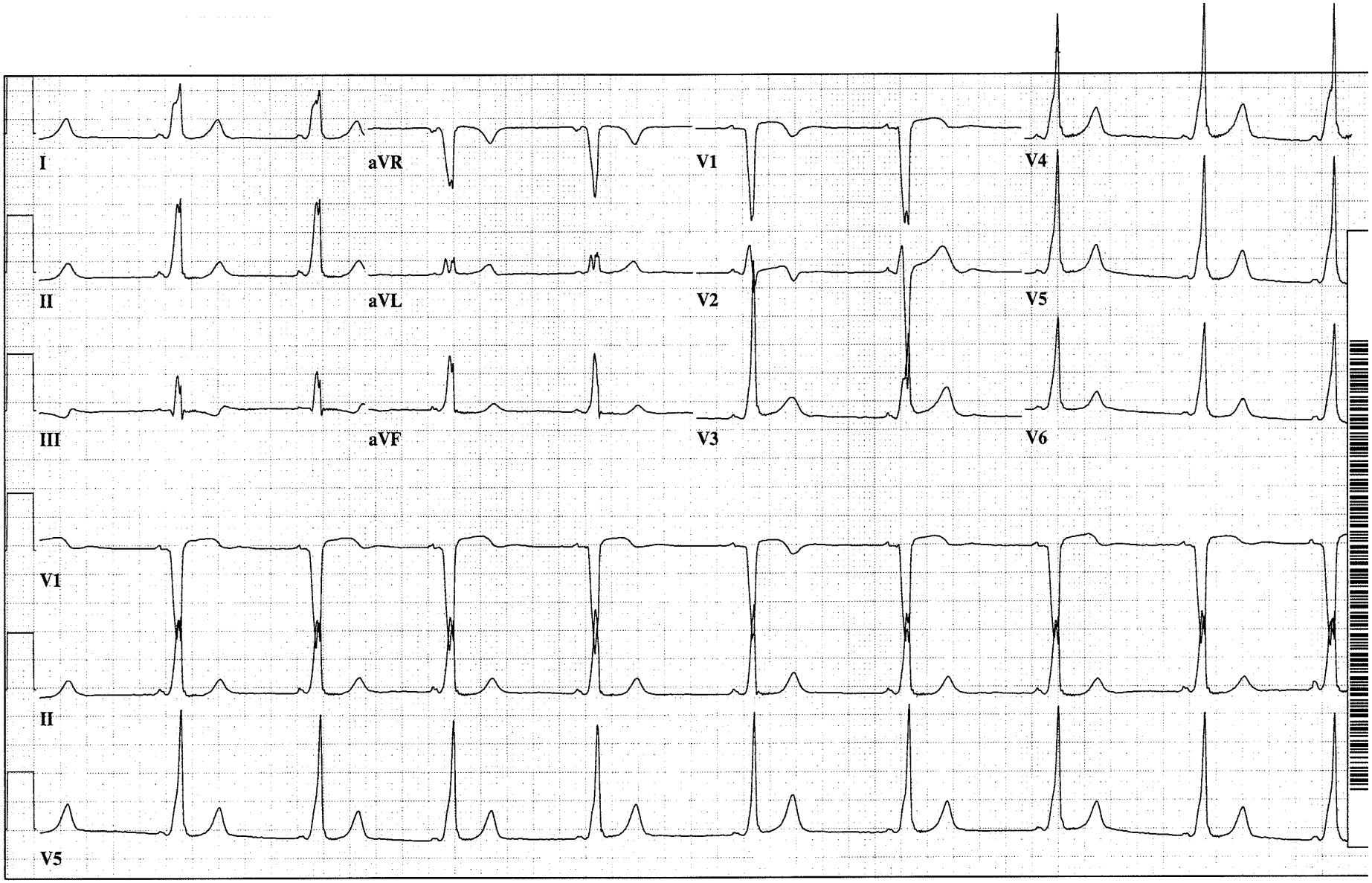


Figure 6.2A.

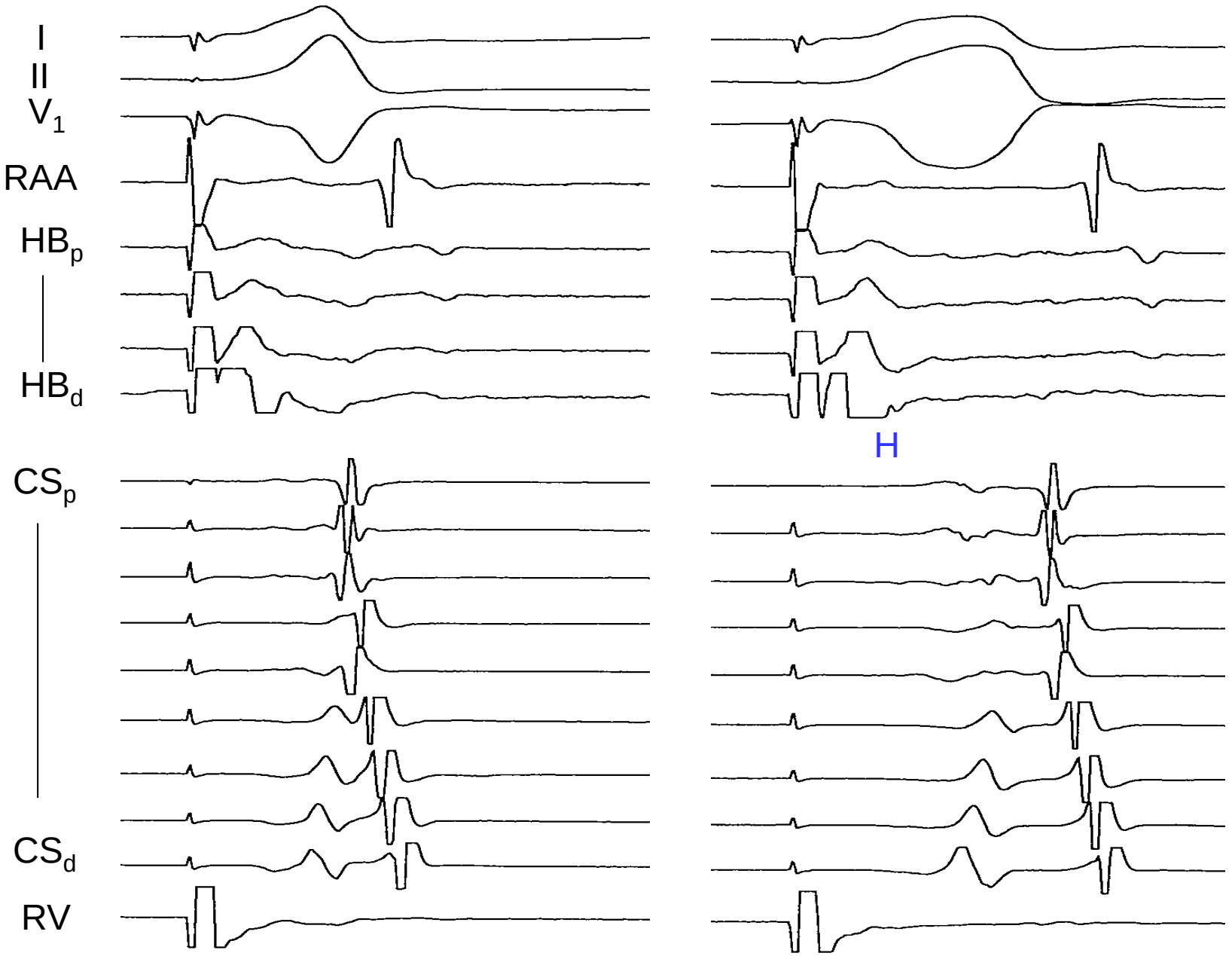


Figure 6.2B.

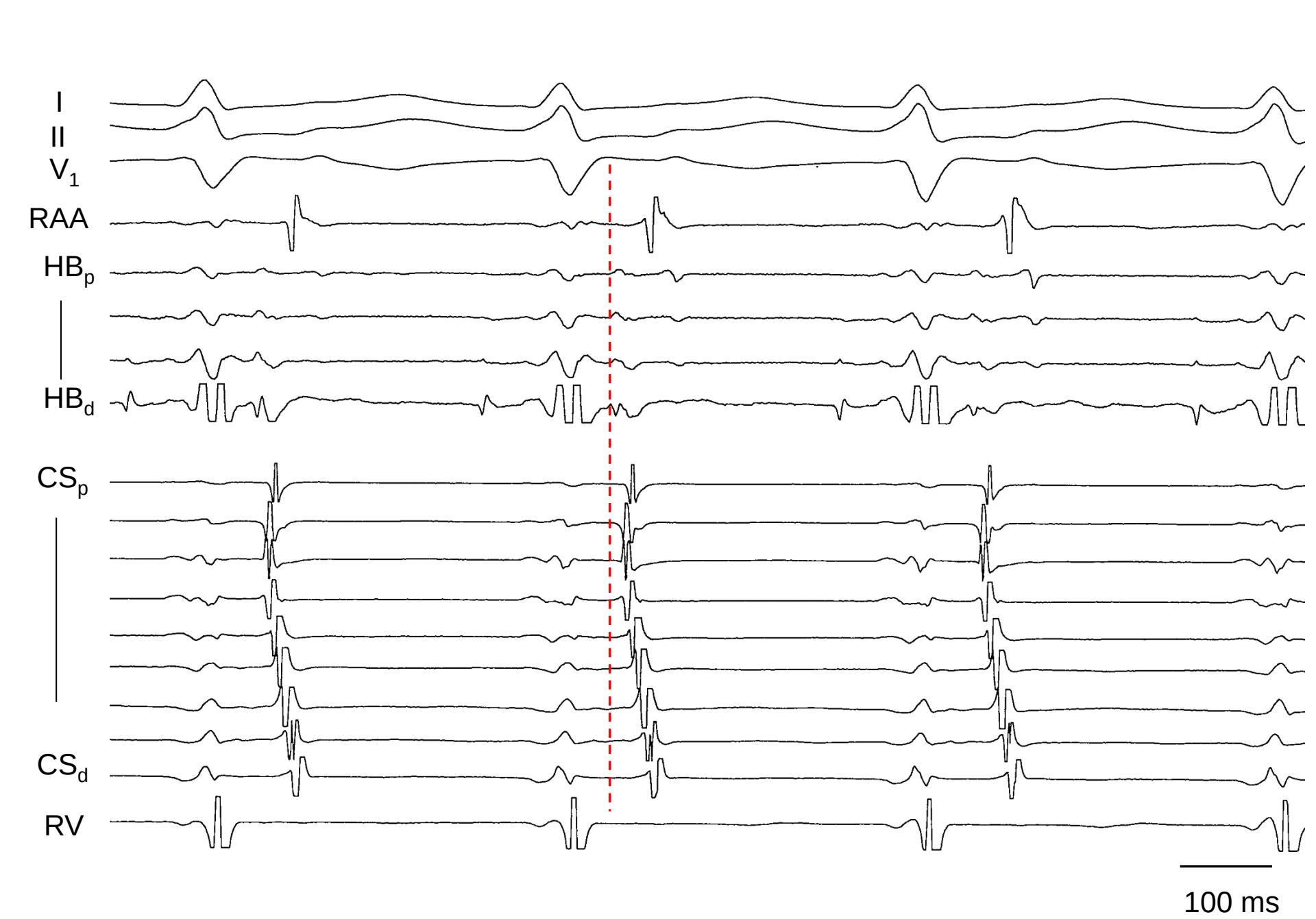


Figure 6.2C

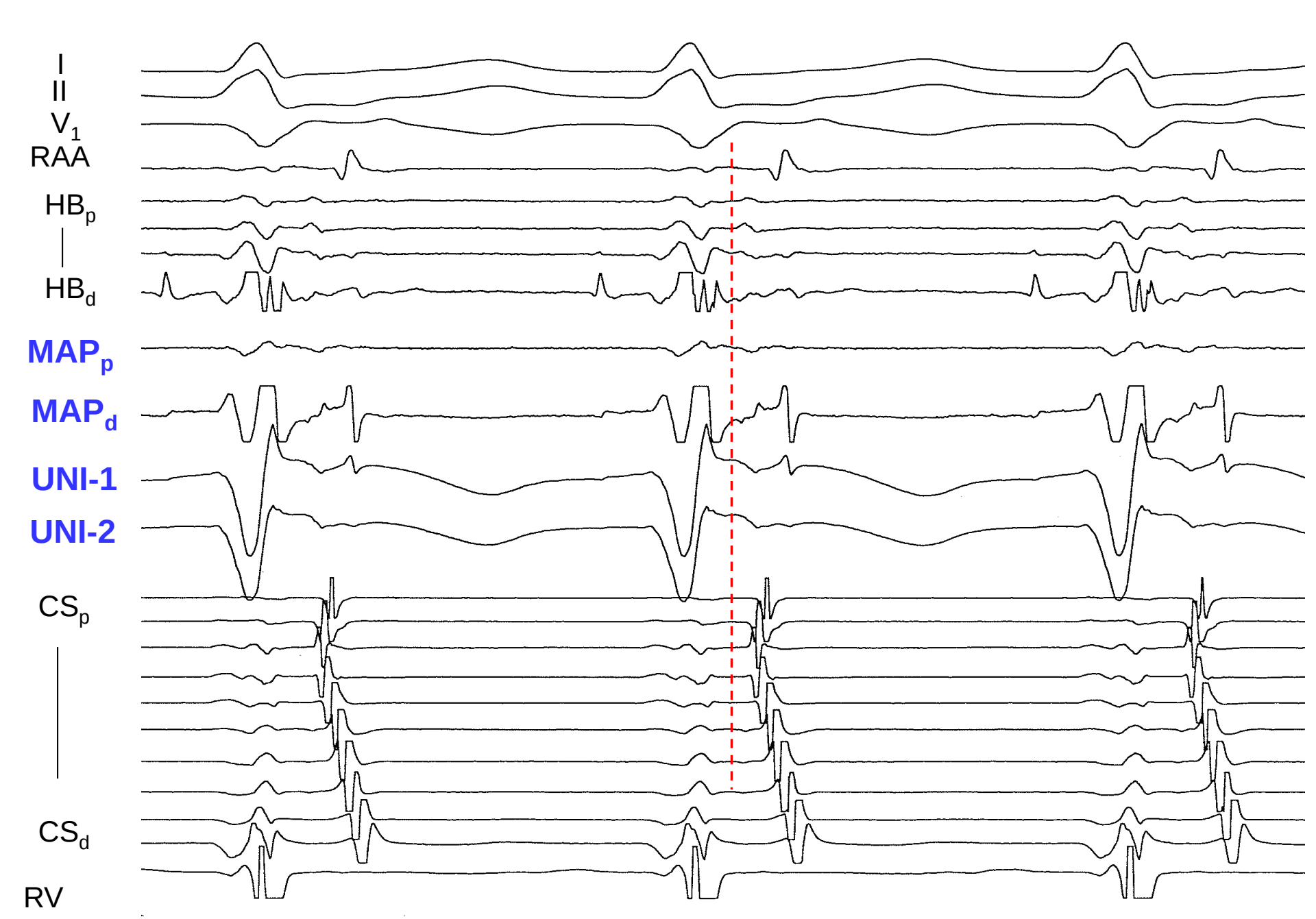


Figure 6.2D

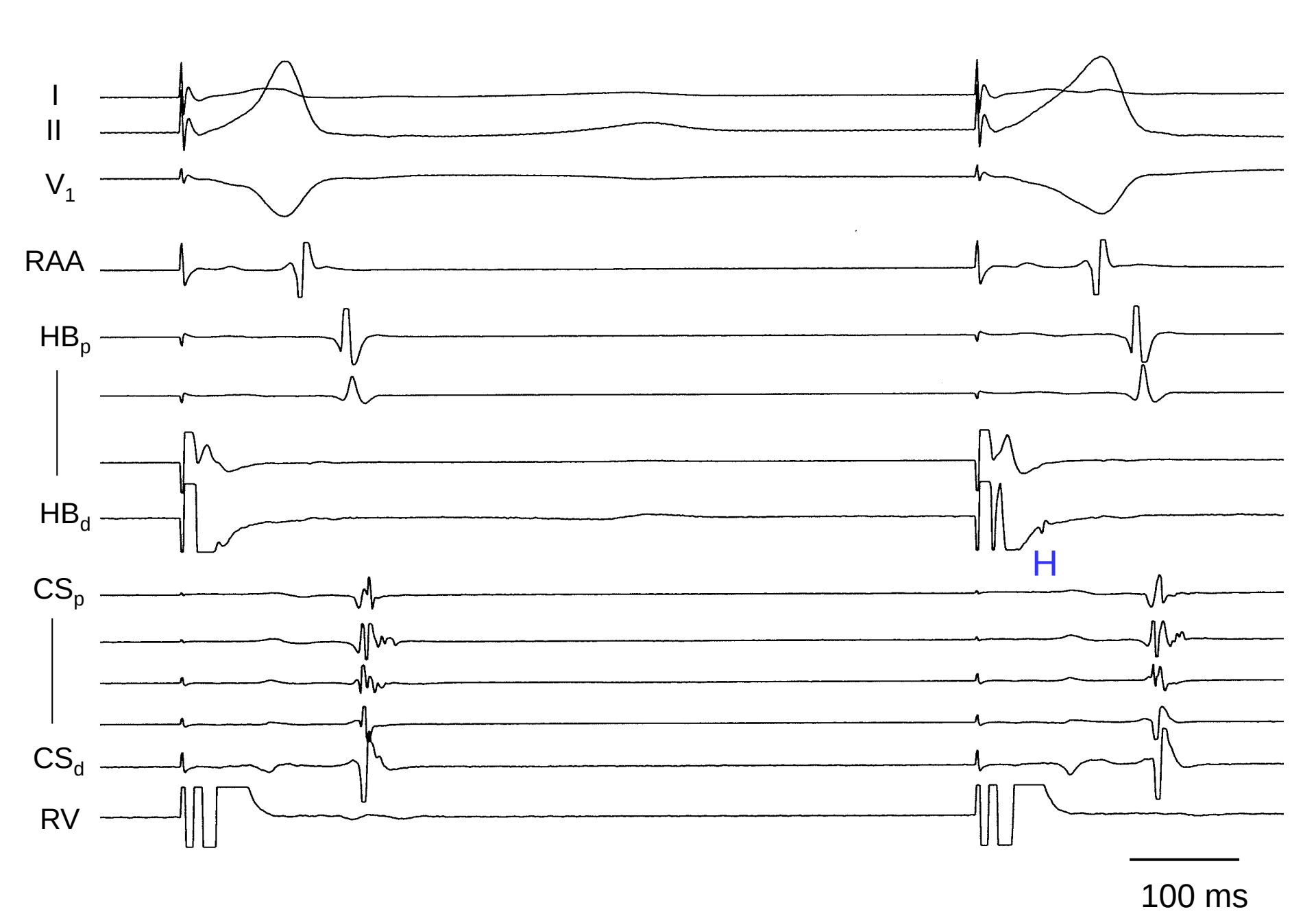


Figure 6.3A

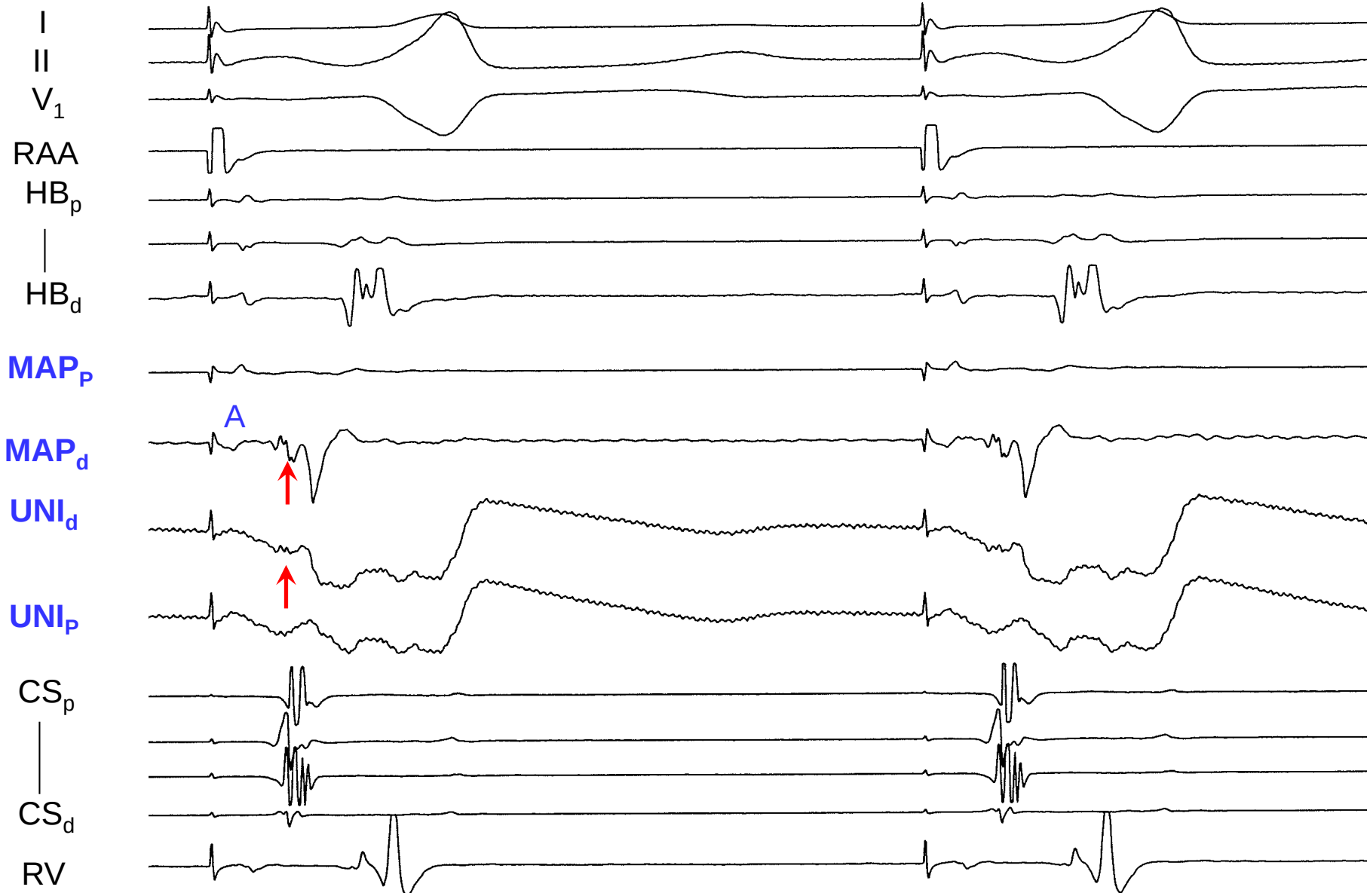


Figure 6.3B

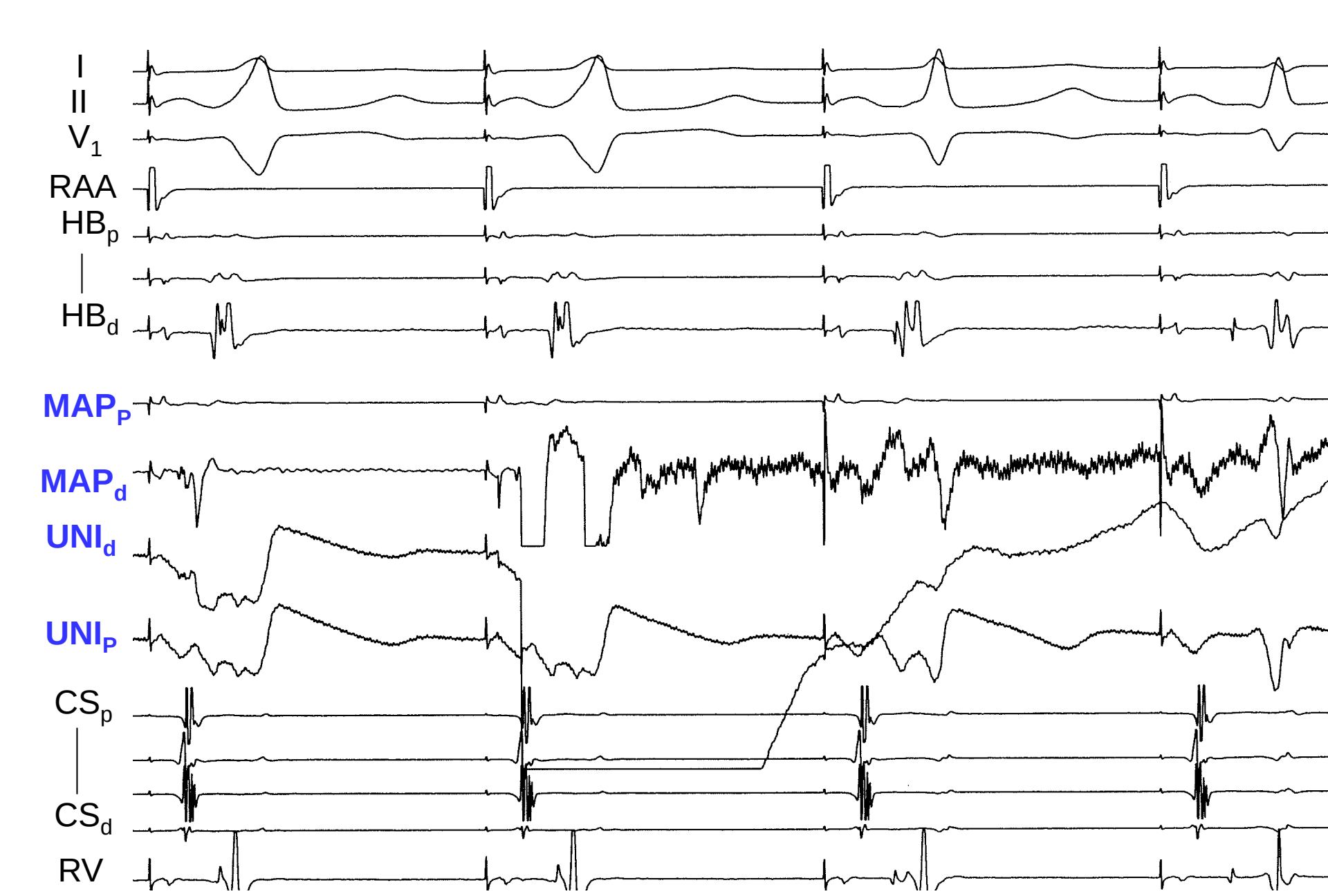


Figure 6.3C

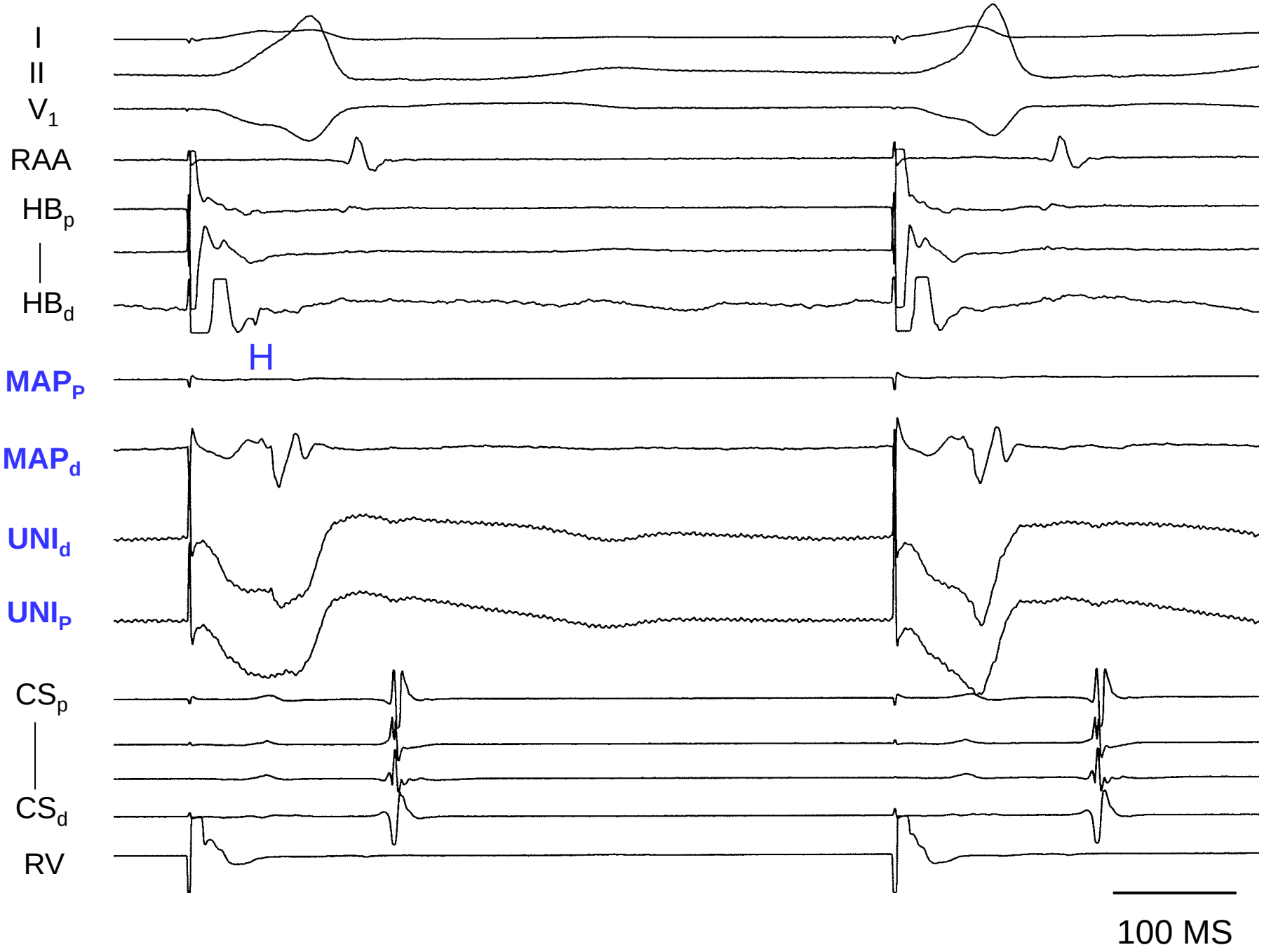


Figure 6.3D

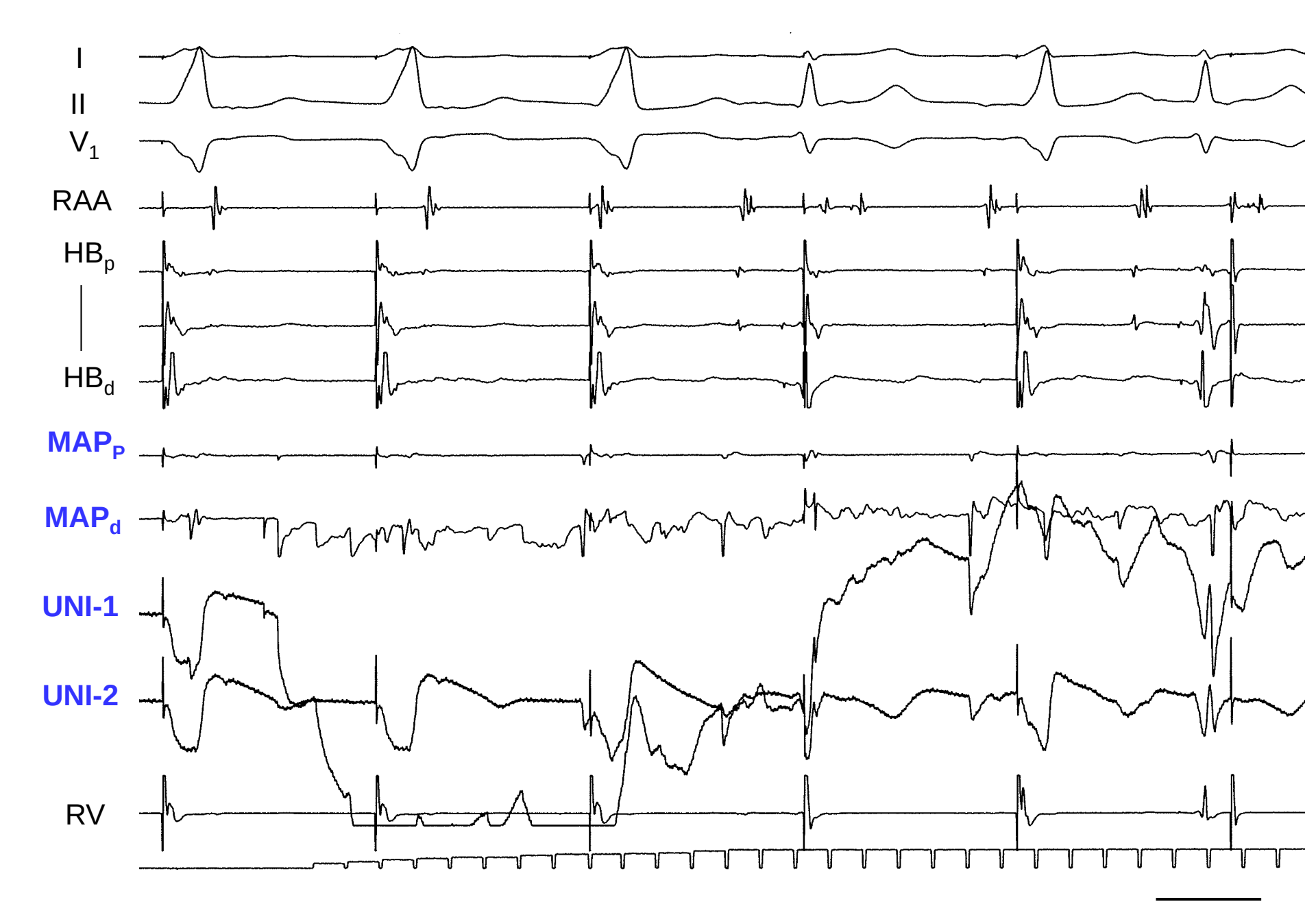


Figure 6.3E

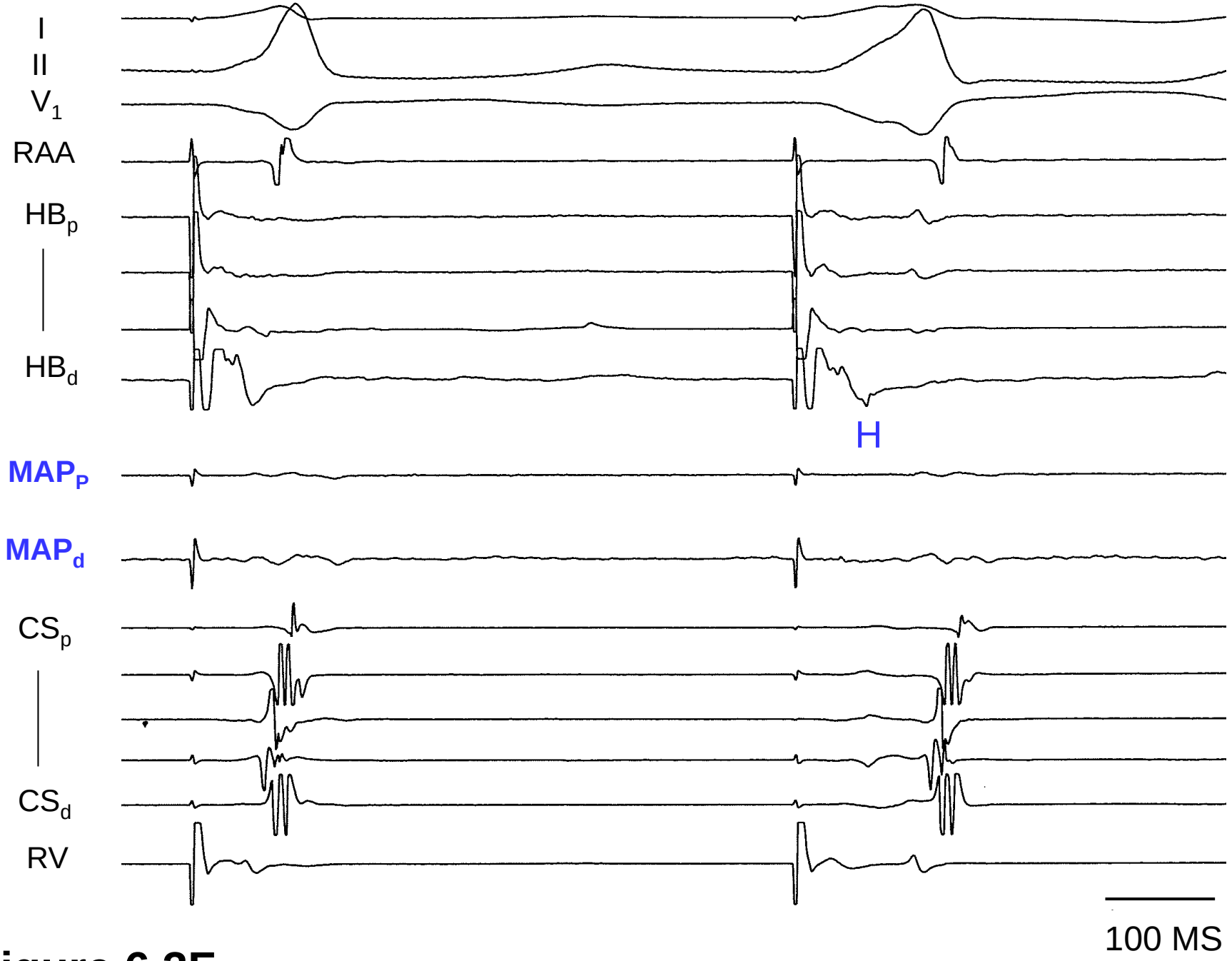


Figure 6.3F

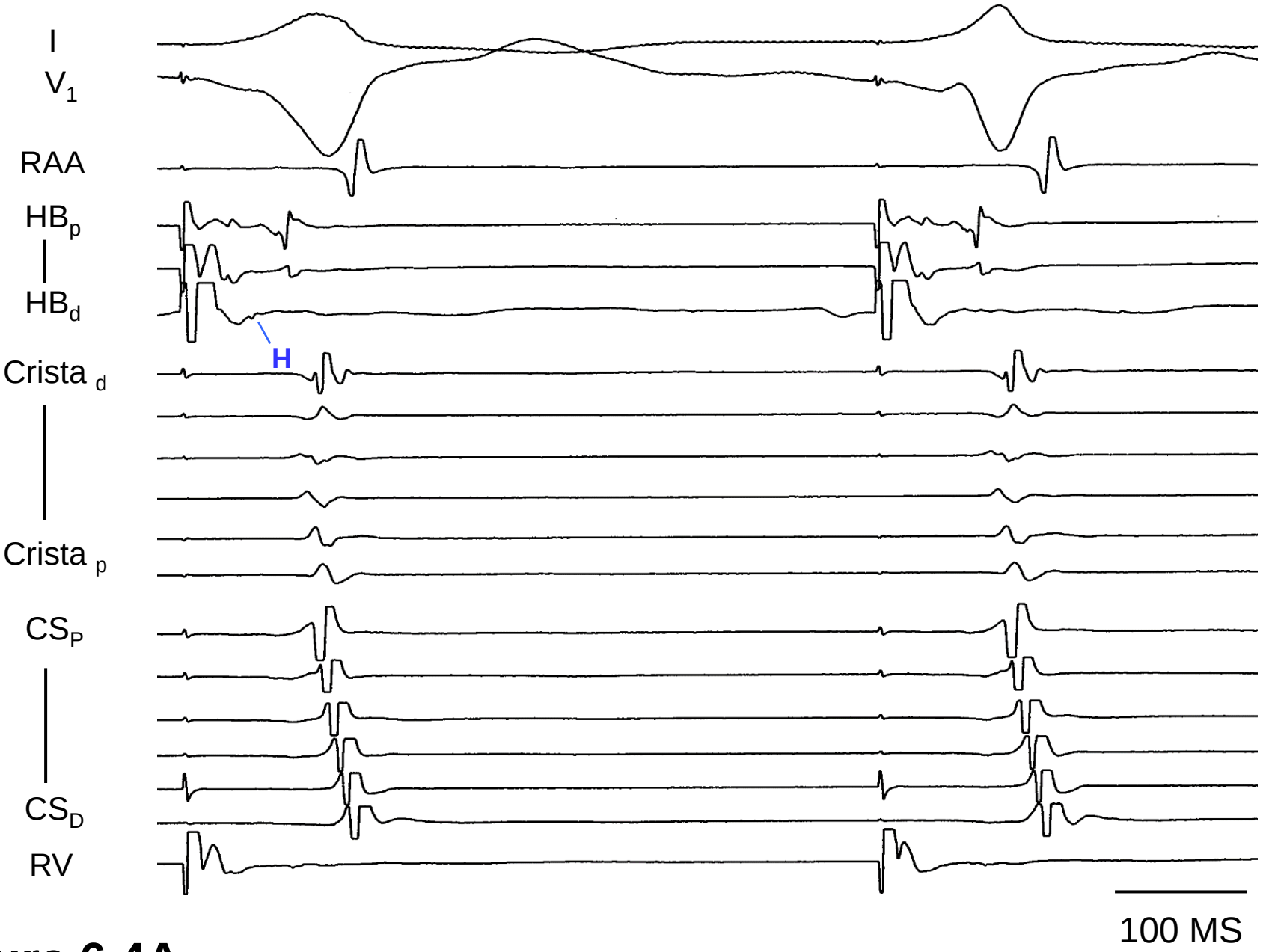


Figure 6.4A

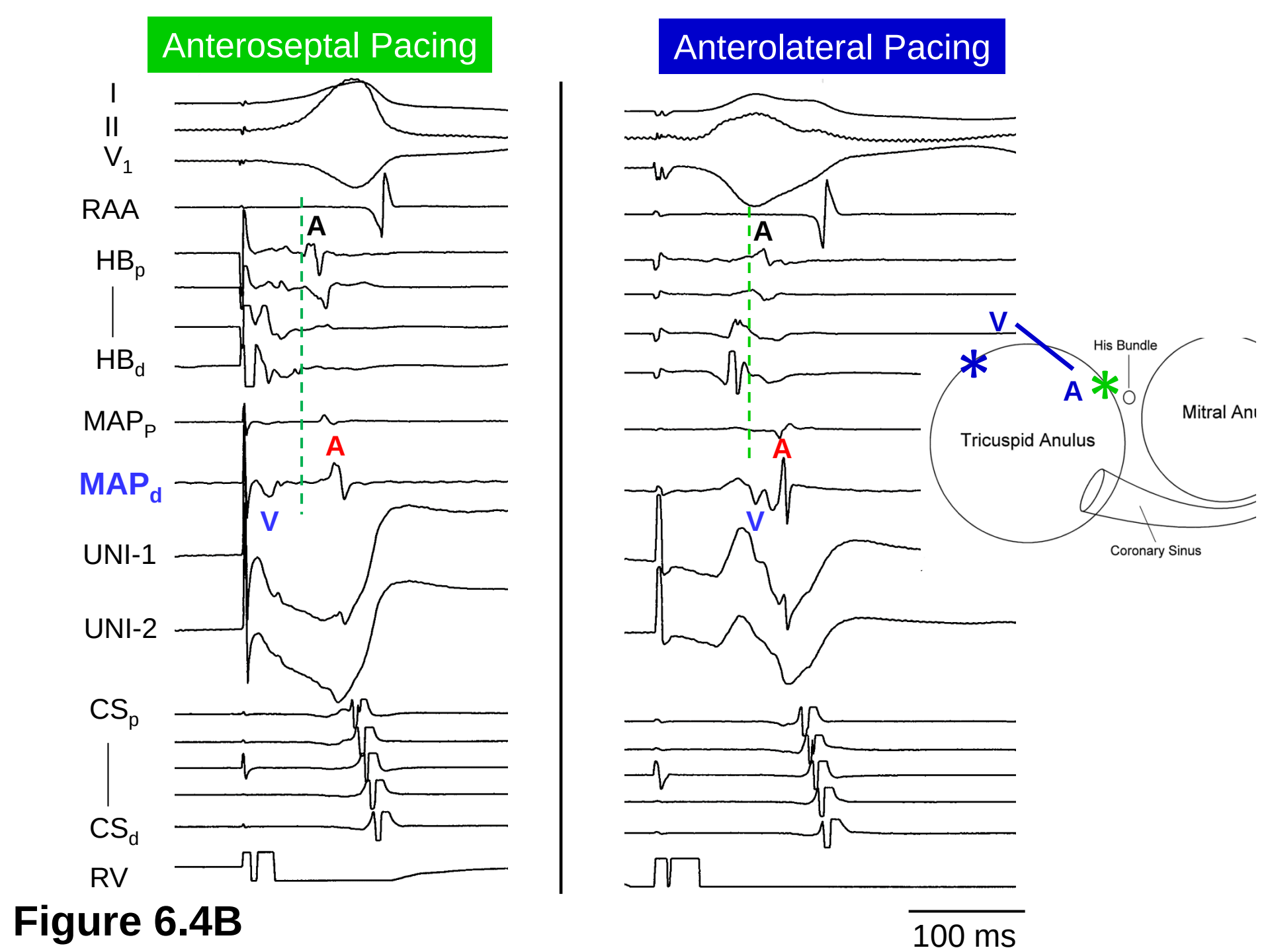

Anteroseptal Pacing
Anterolateral Pacing
I
II
V1
RAA
HBp
HBd
MAPP
MAPd
UNI-1
UNI-2
CSp
CSd
RV
A
V
His Bundle
Tricuspid Anulus
Coronary Sinus
100 ms

Figure 6.4B

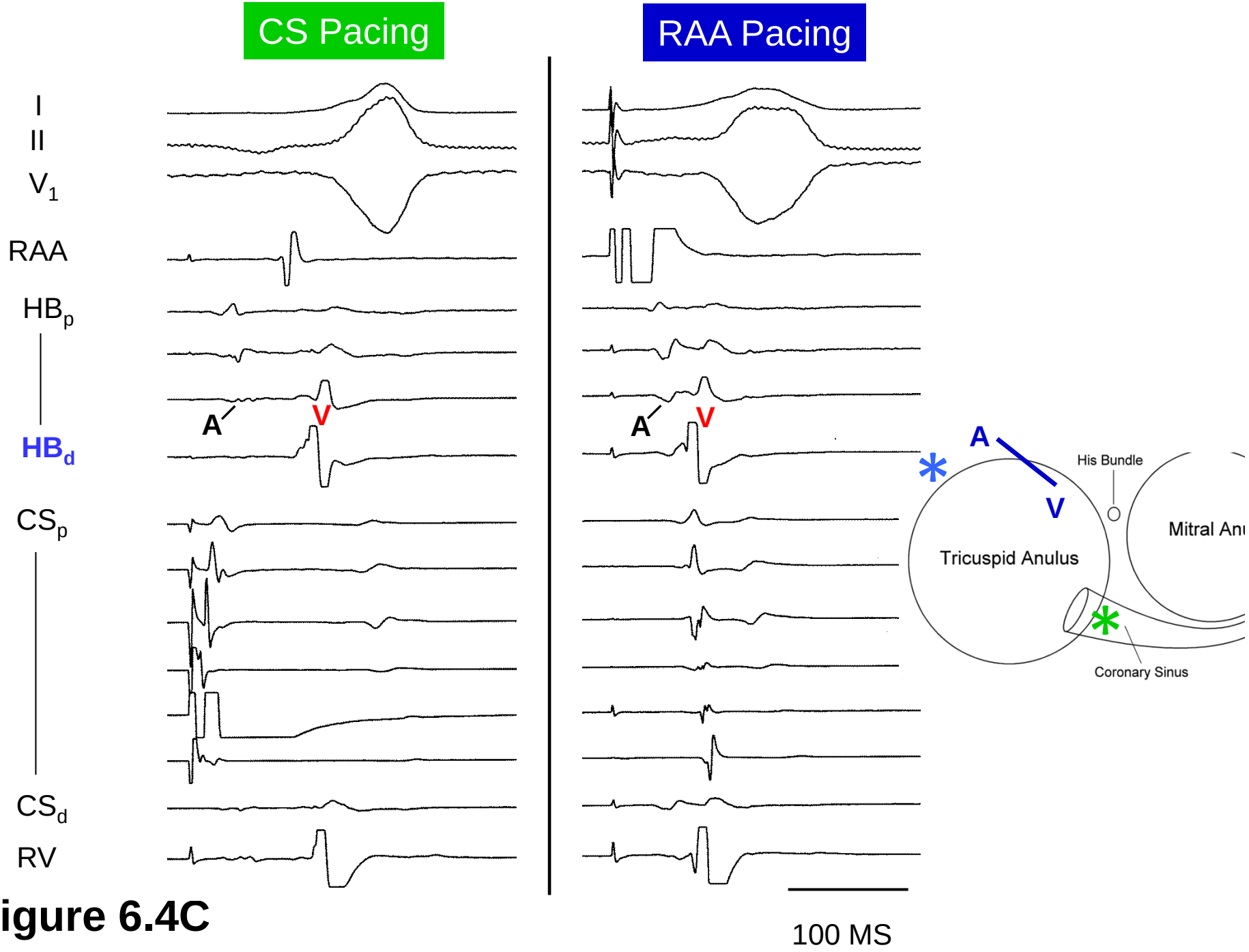
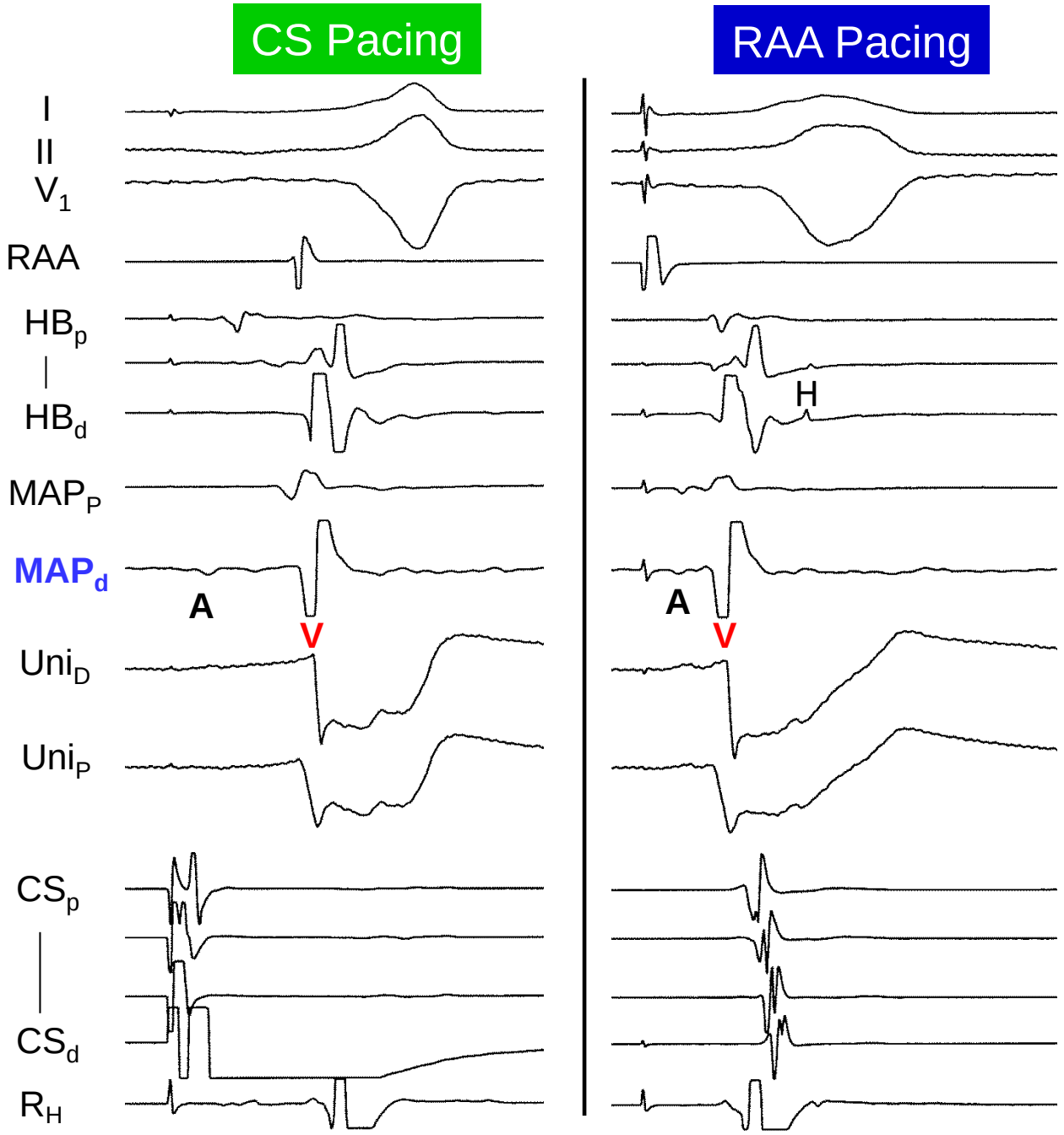

CS Pacing
RAA Pacing
I
II
V1
RAA
HBp
HBd
CSp
CSd
RV
A
V
A
V
His Bundle
Tricuspid Anulus
Mitral Anu
Coronary Sinus
100 MS

Figure 6.4C


CS Pacing
RAA Pacing
I
II
V1
RAA
HBp
HBd
MAPP
MAPd
A
V
UniD
UniP
CSp
CSd
RH
H
A
V
100 MS

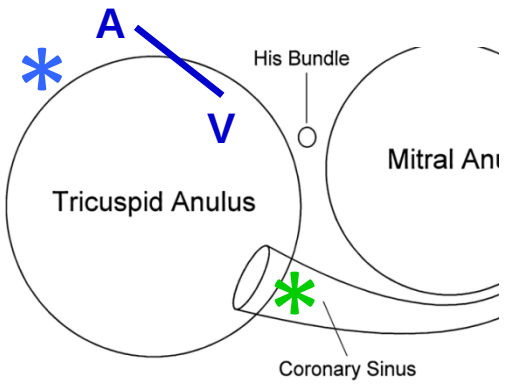

A
V
His Bundle
Tricuspid Anulus
Mitral Anu
Coronary Sinus

Figure 6.4D

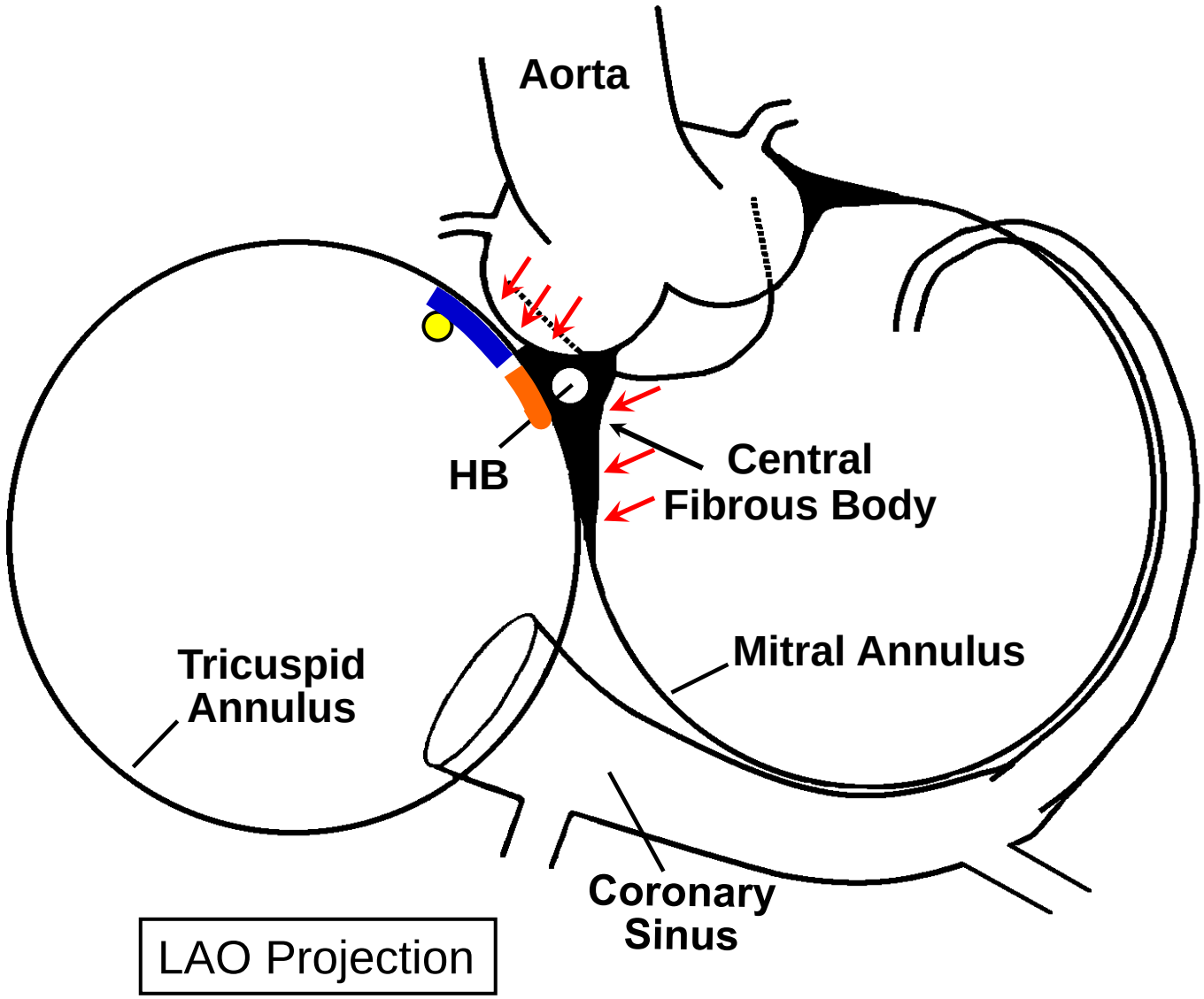
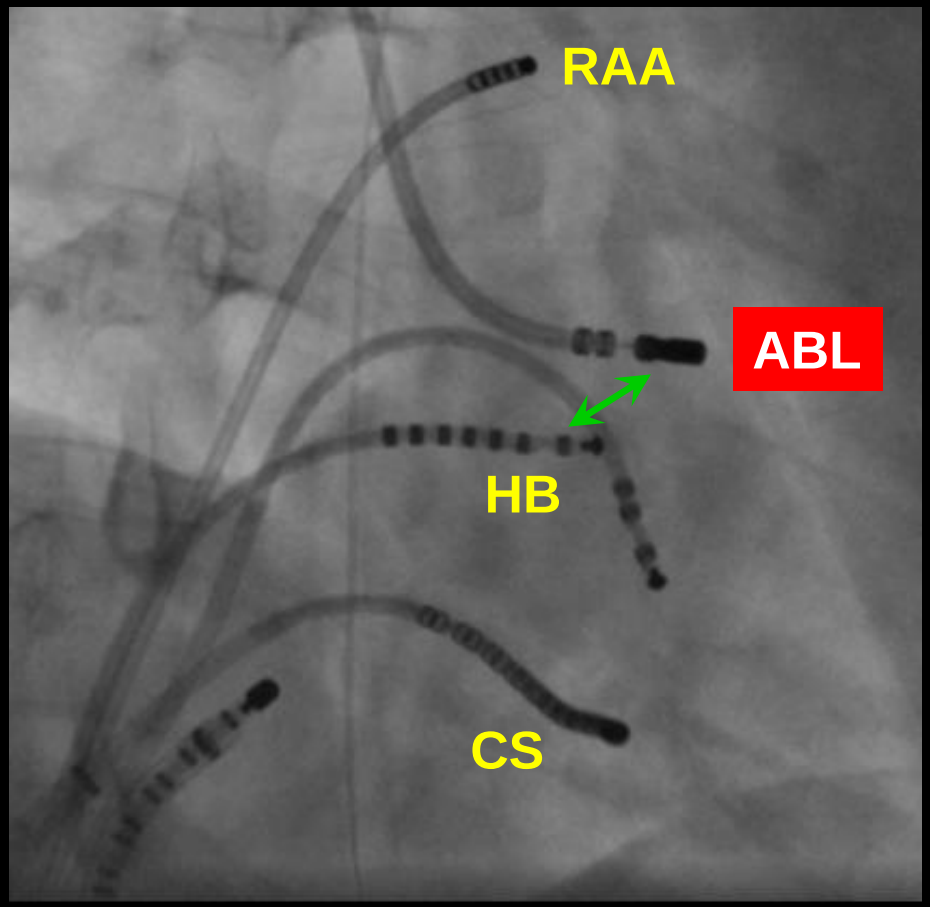
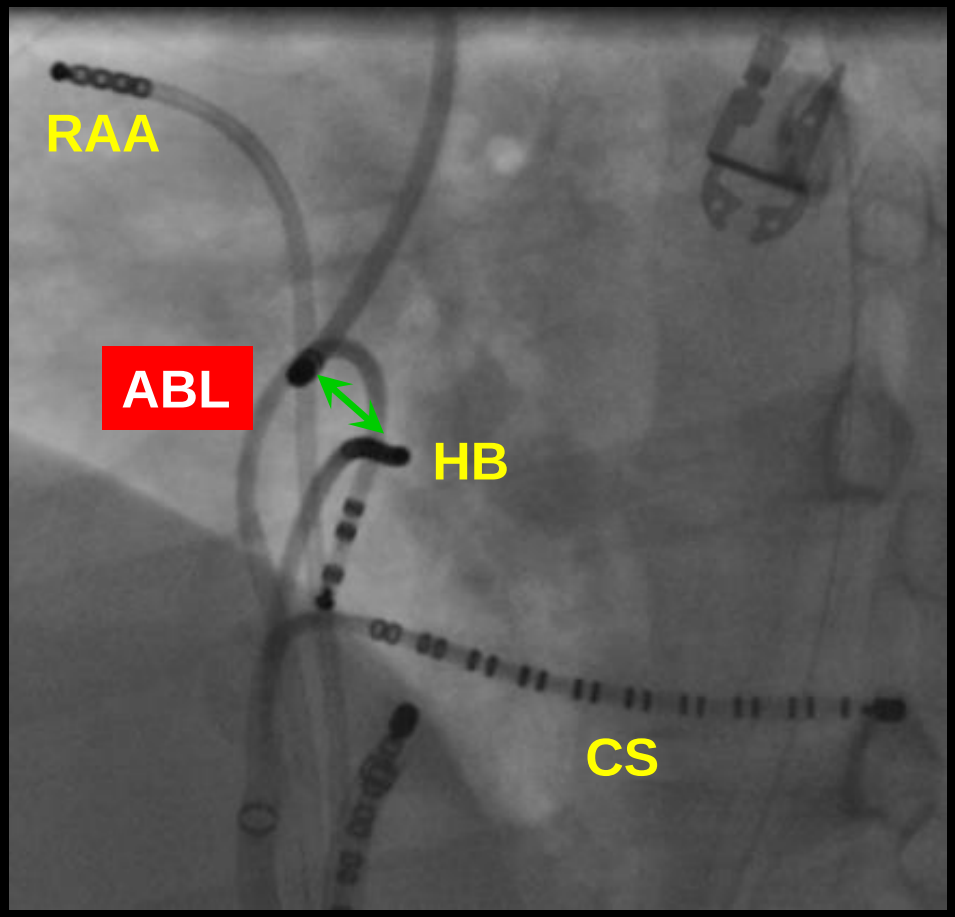

Aorta
HB
Central
Fibrous Body
Tricuspid
Annulus
Mitral Annulus
Coronary
Sinus
LAO Projection

Figure 6.5A

Subclavian or internal jugular approach:

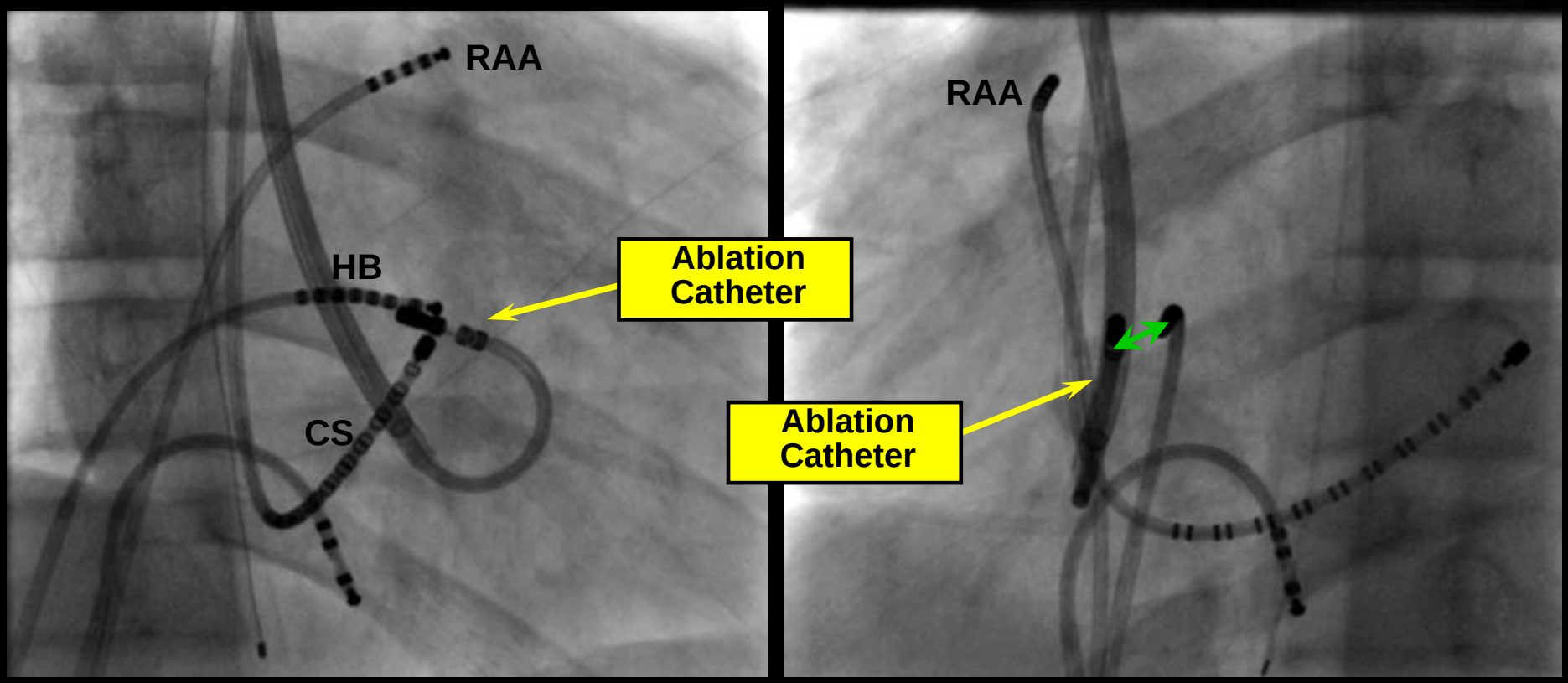


RAO



LAO

Figure 6.5B



RAO Projection

LAO Projection

Figure 6.5C

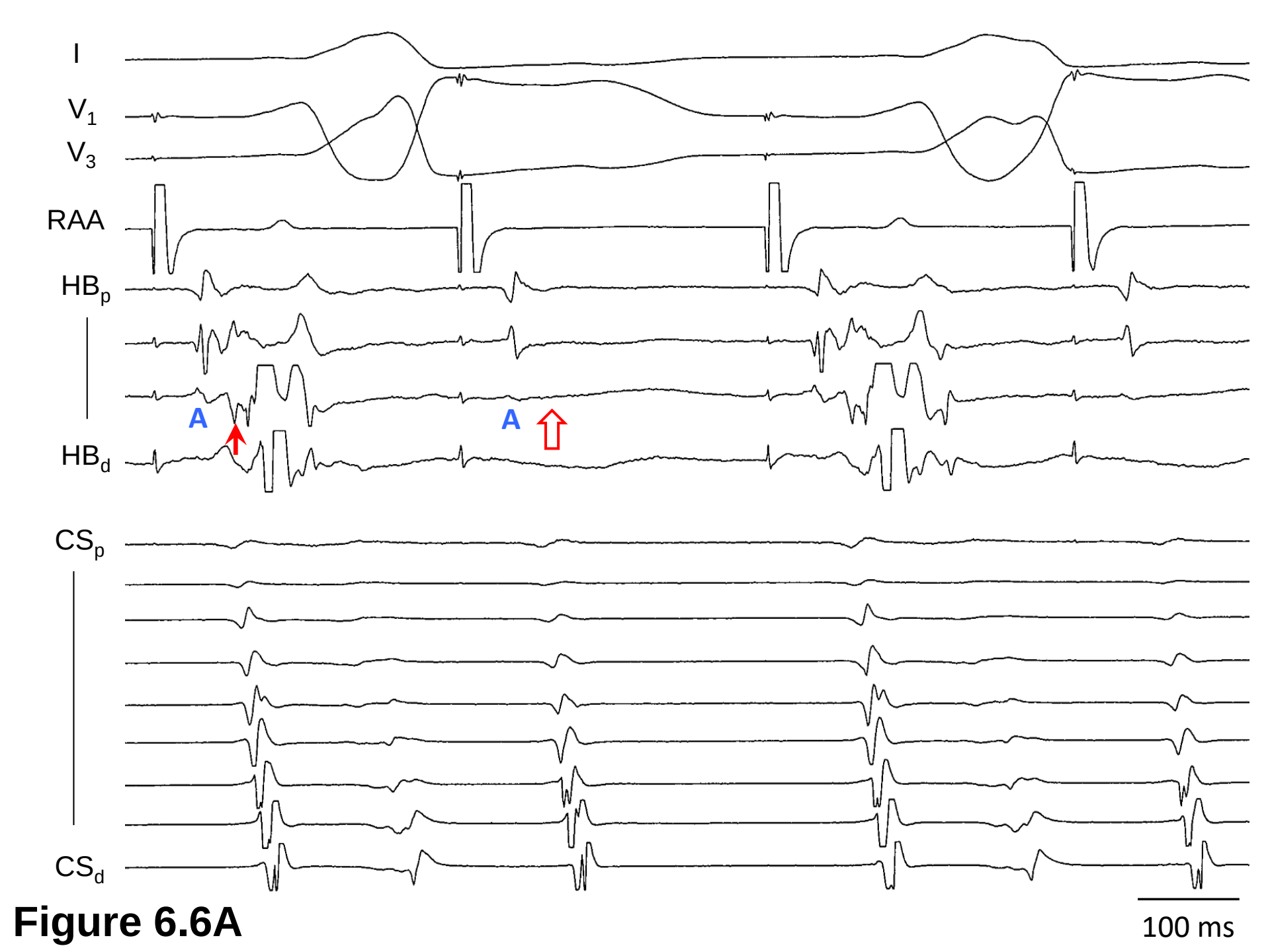


Figure 6.6A

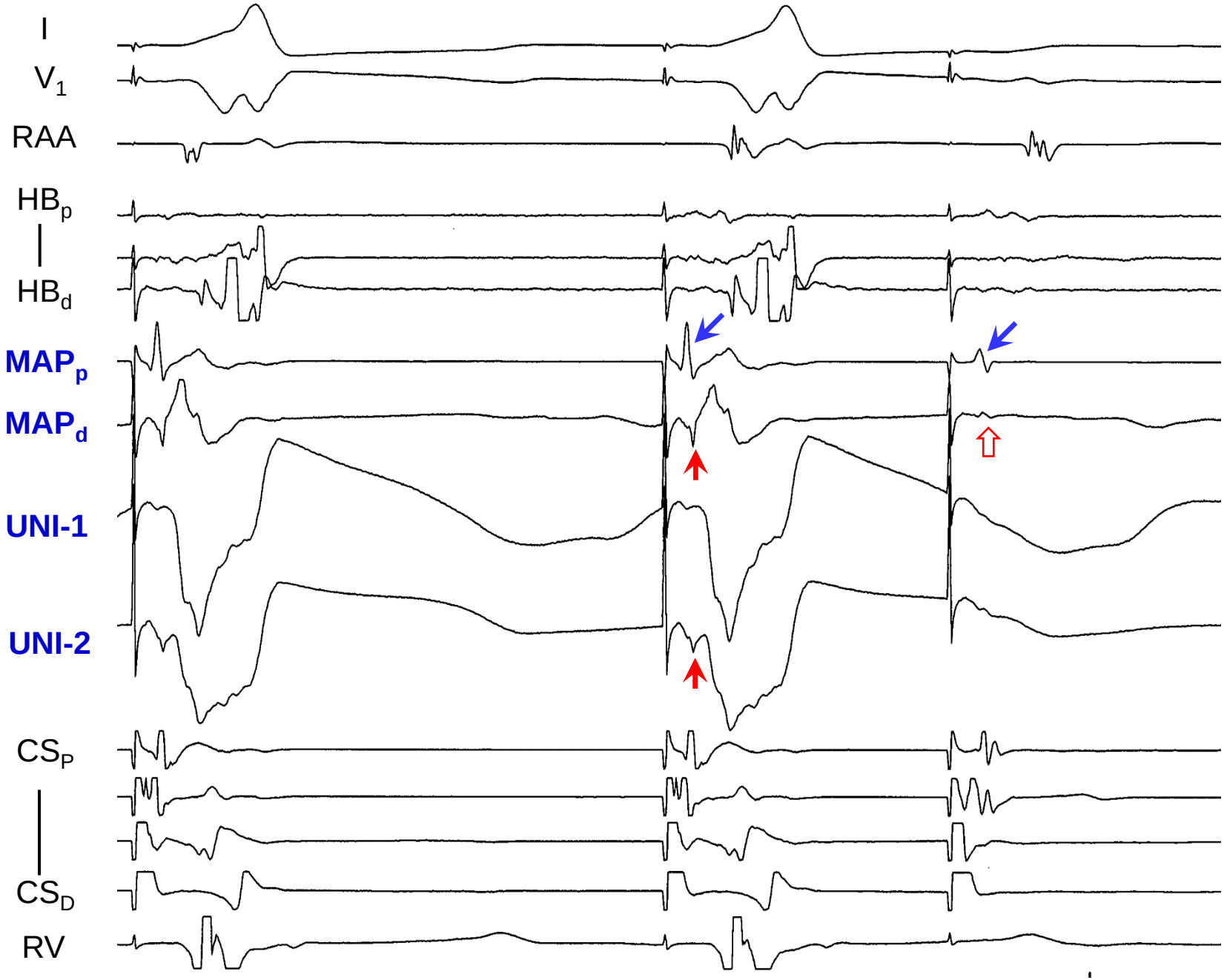


Figure 6.6B

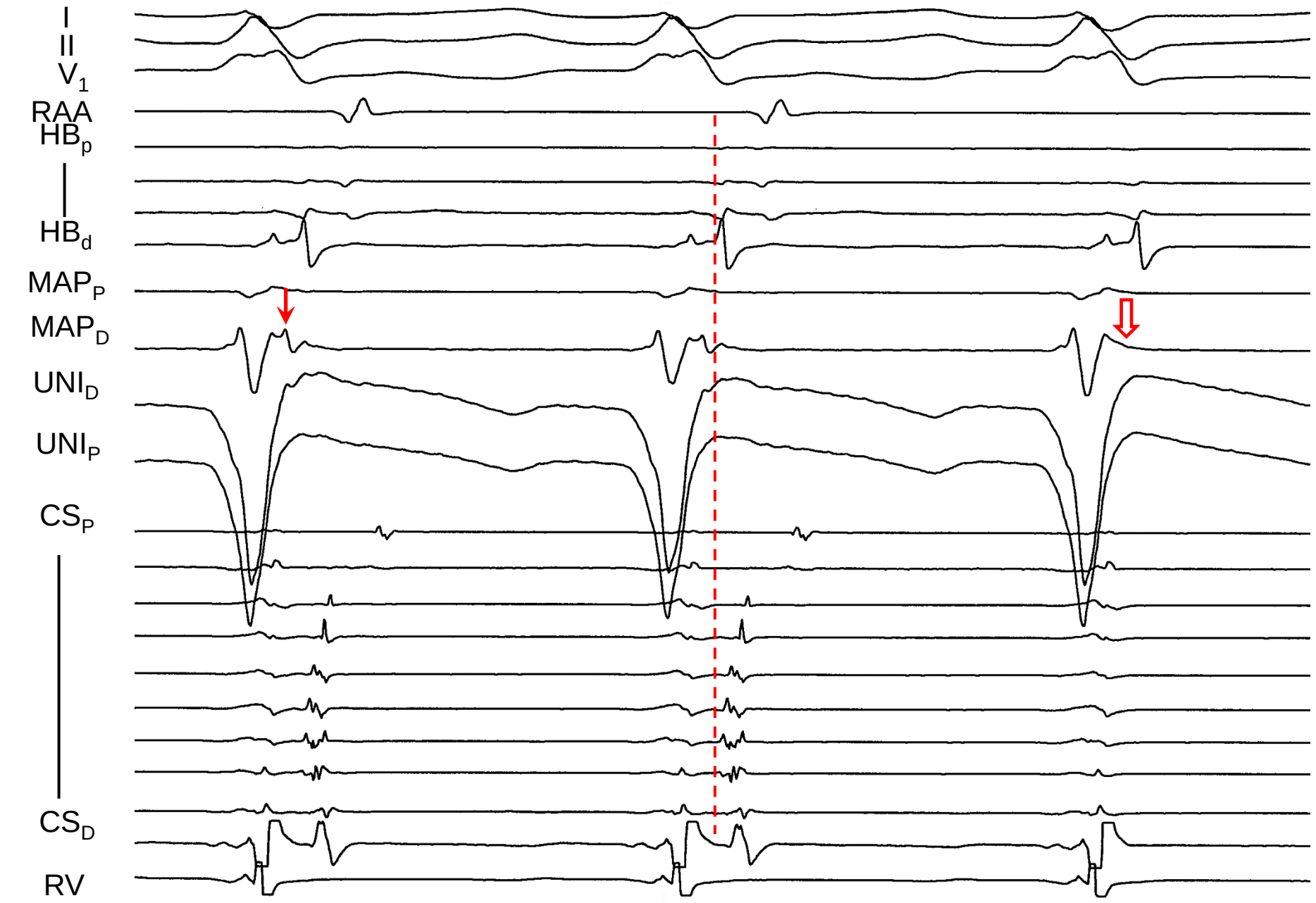


Figure 6.6C

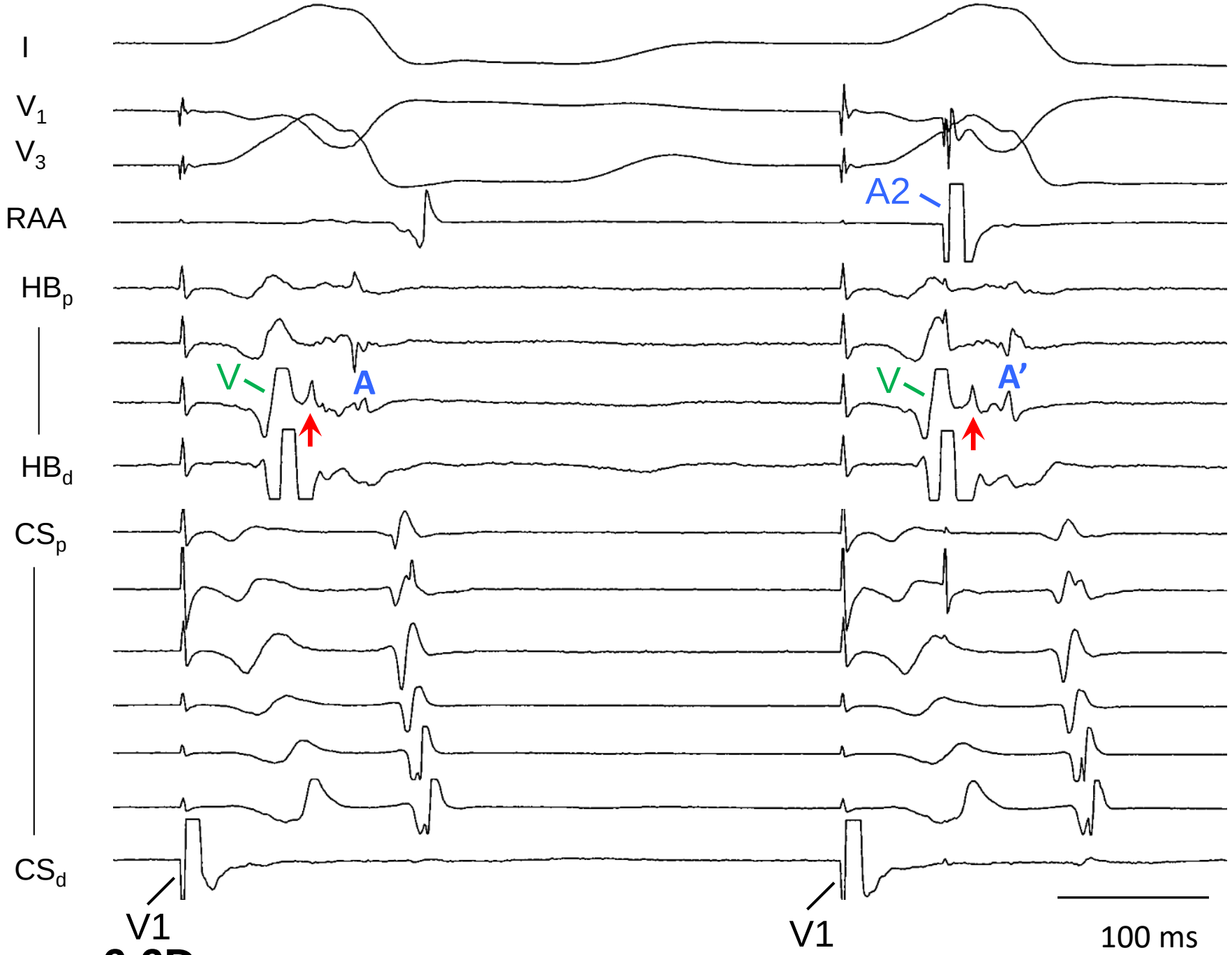


Figure 6.6D

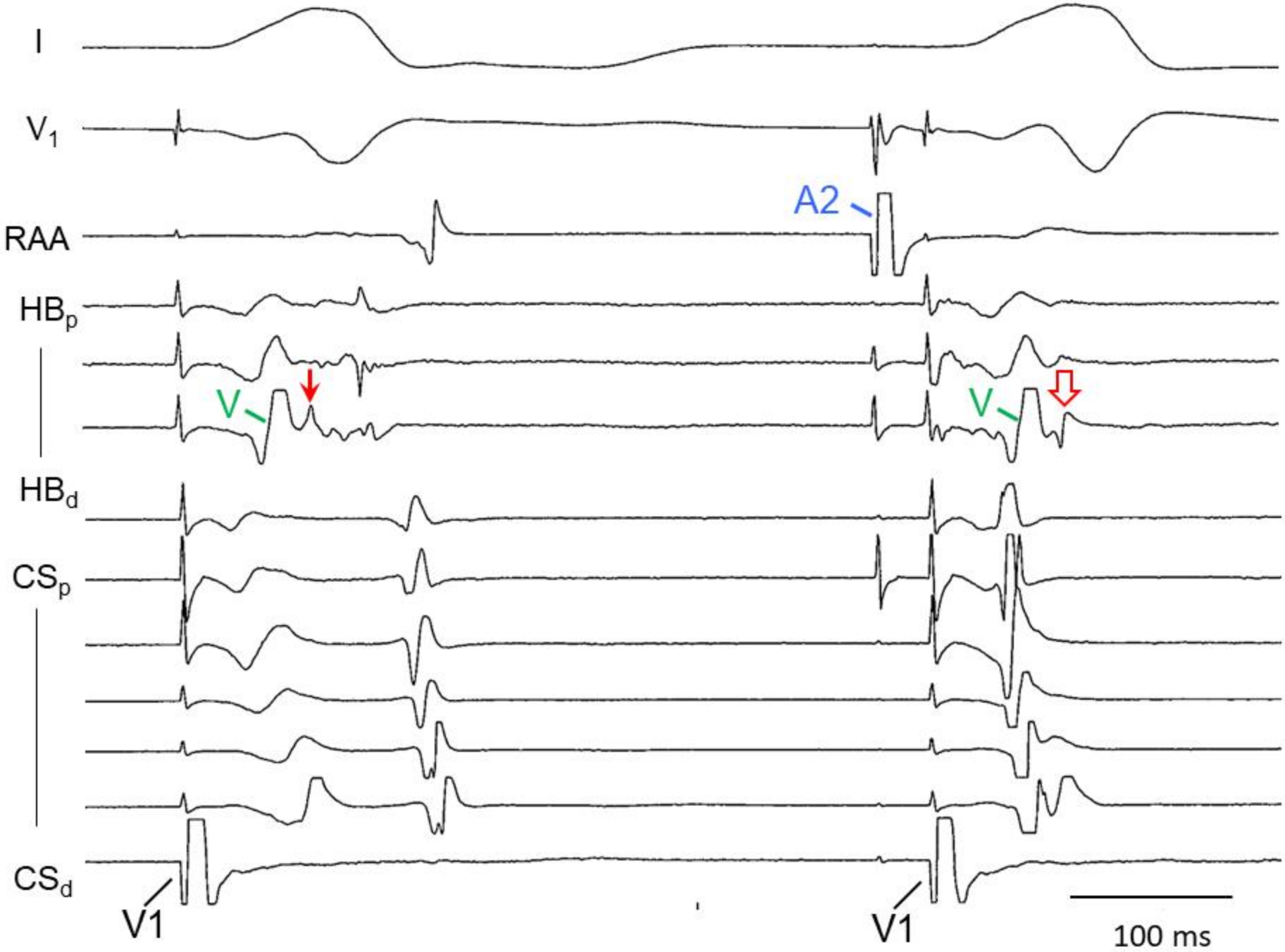


Figure 6.6E

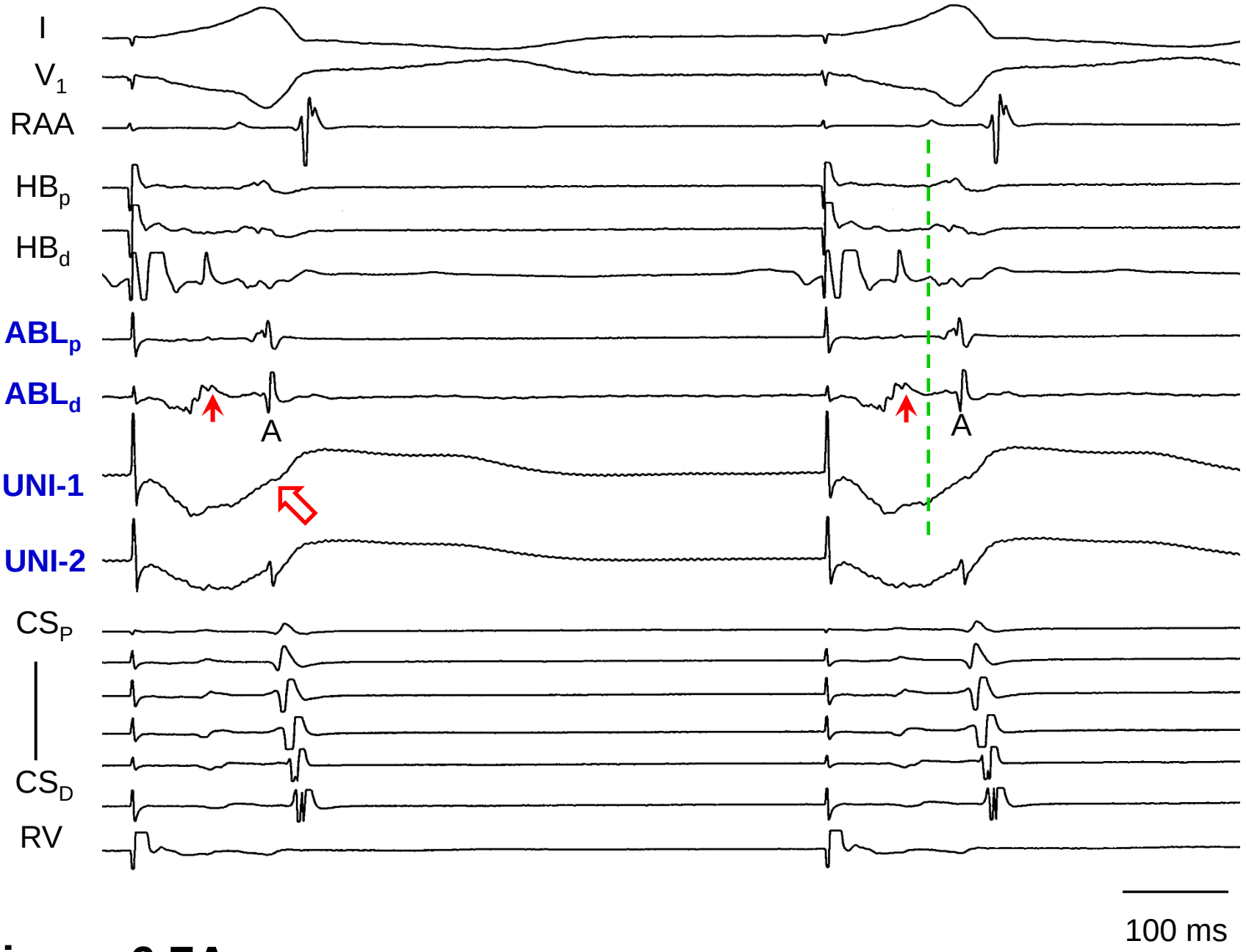


Figure 6.7A

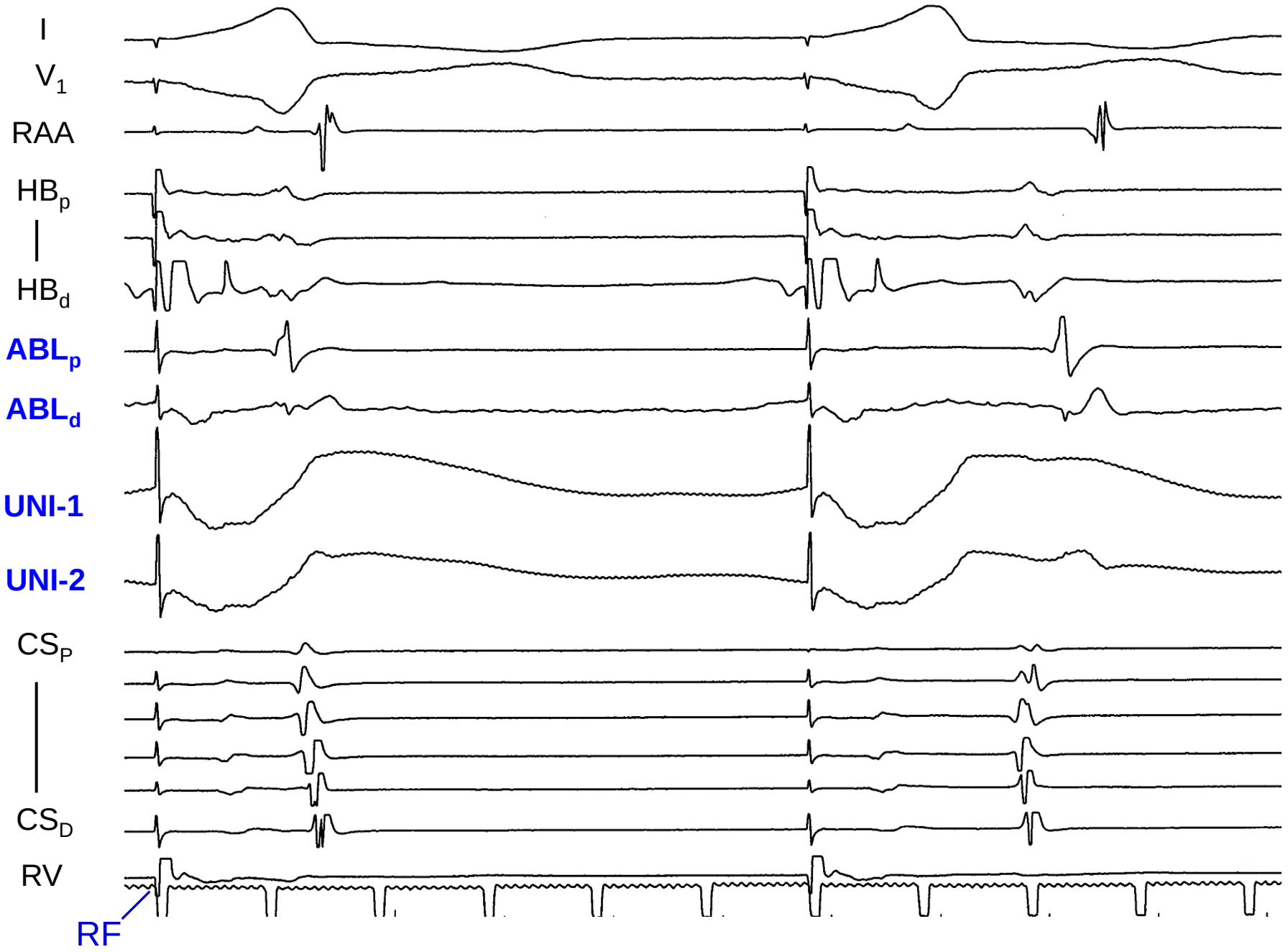


Figure 6.7B

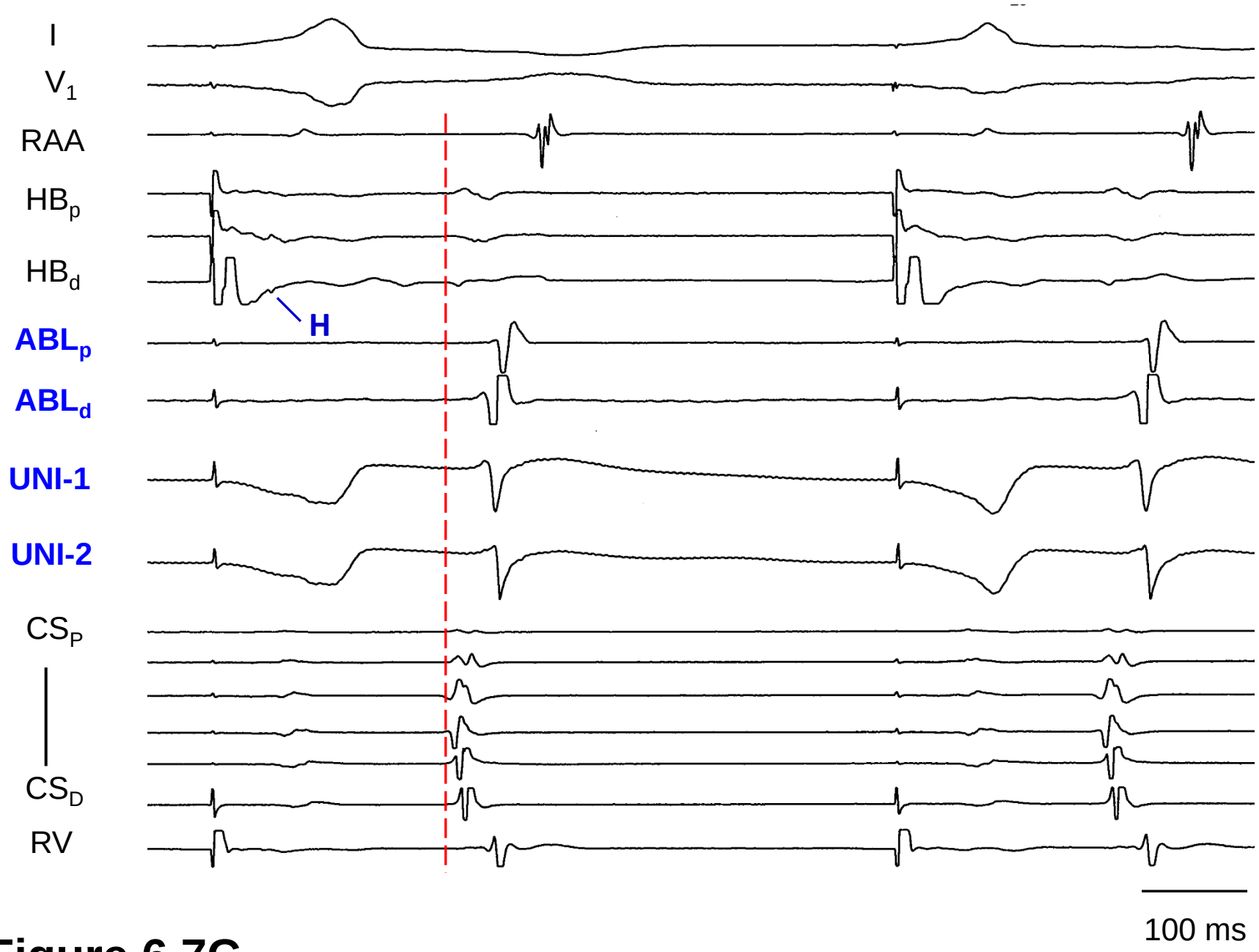


Figure 6.7C

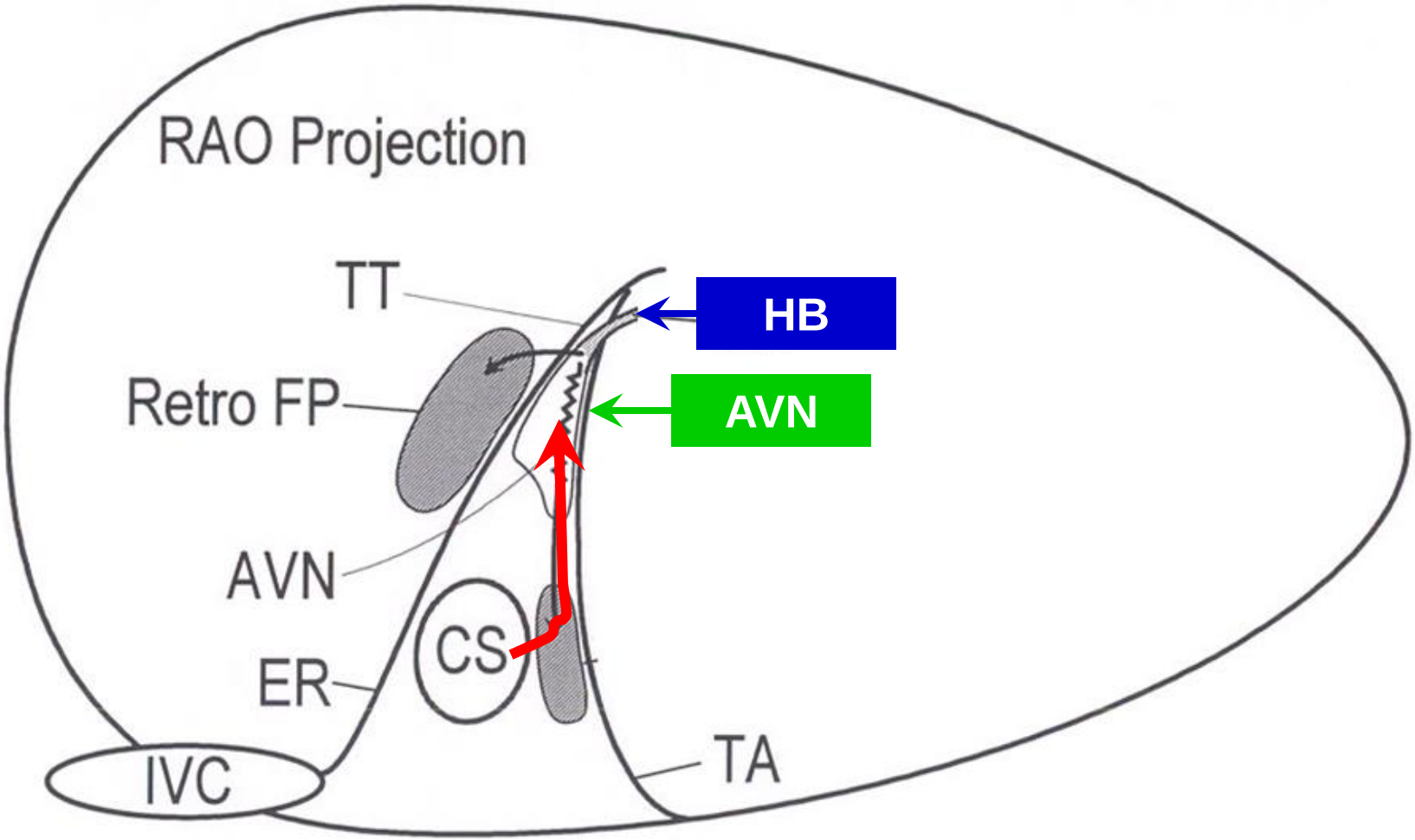


Figure 6.8A

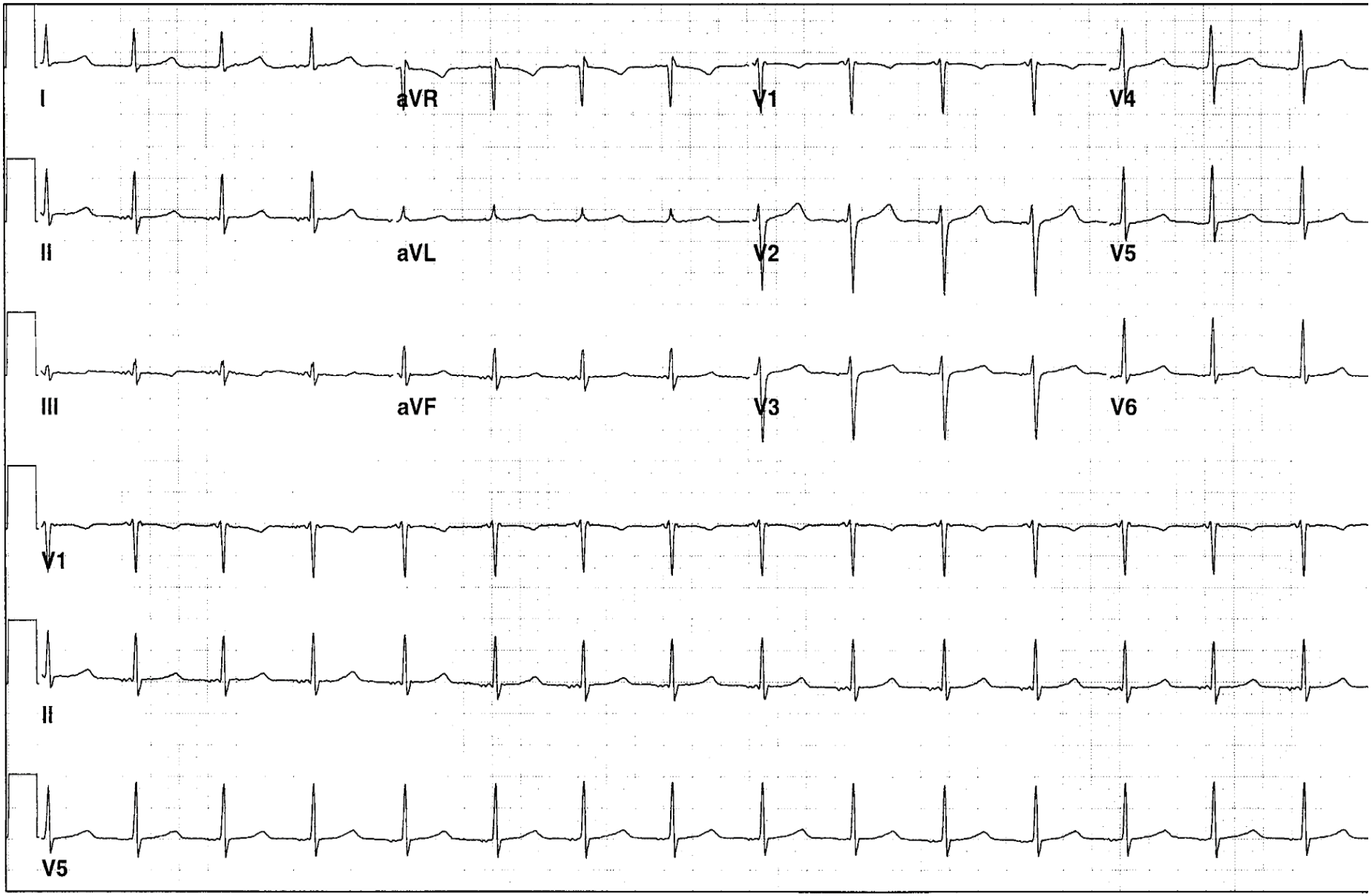


Figure 6.8B

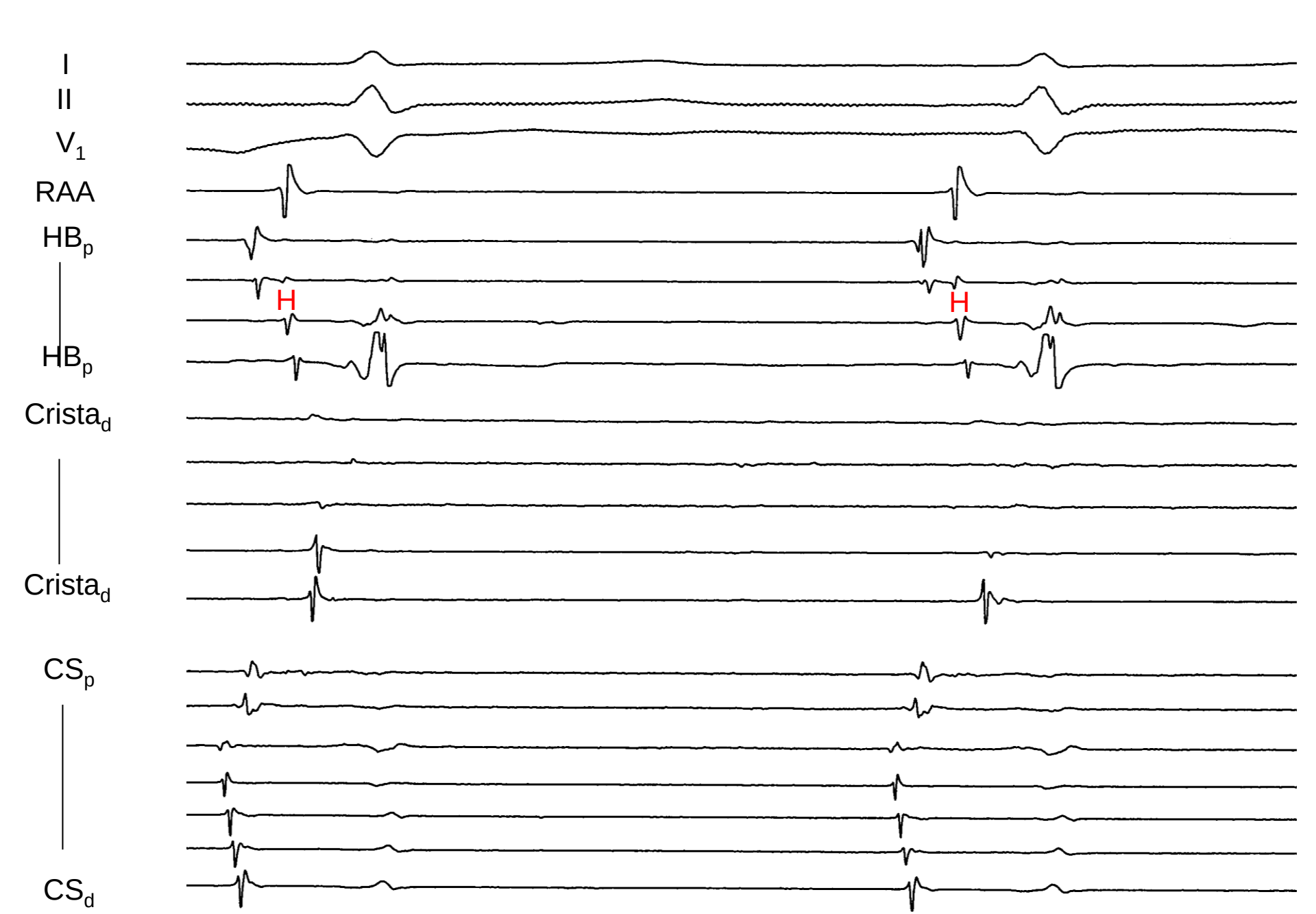


Figure 6.8C

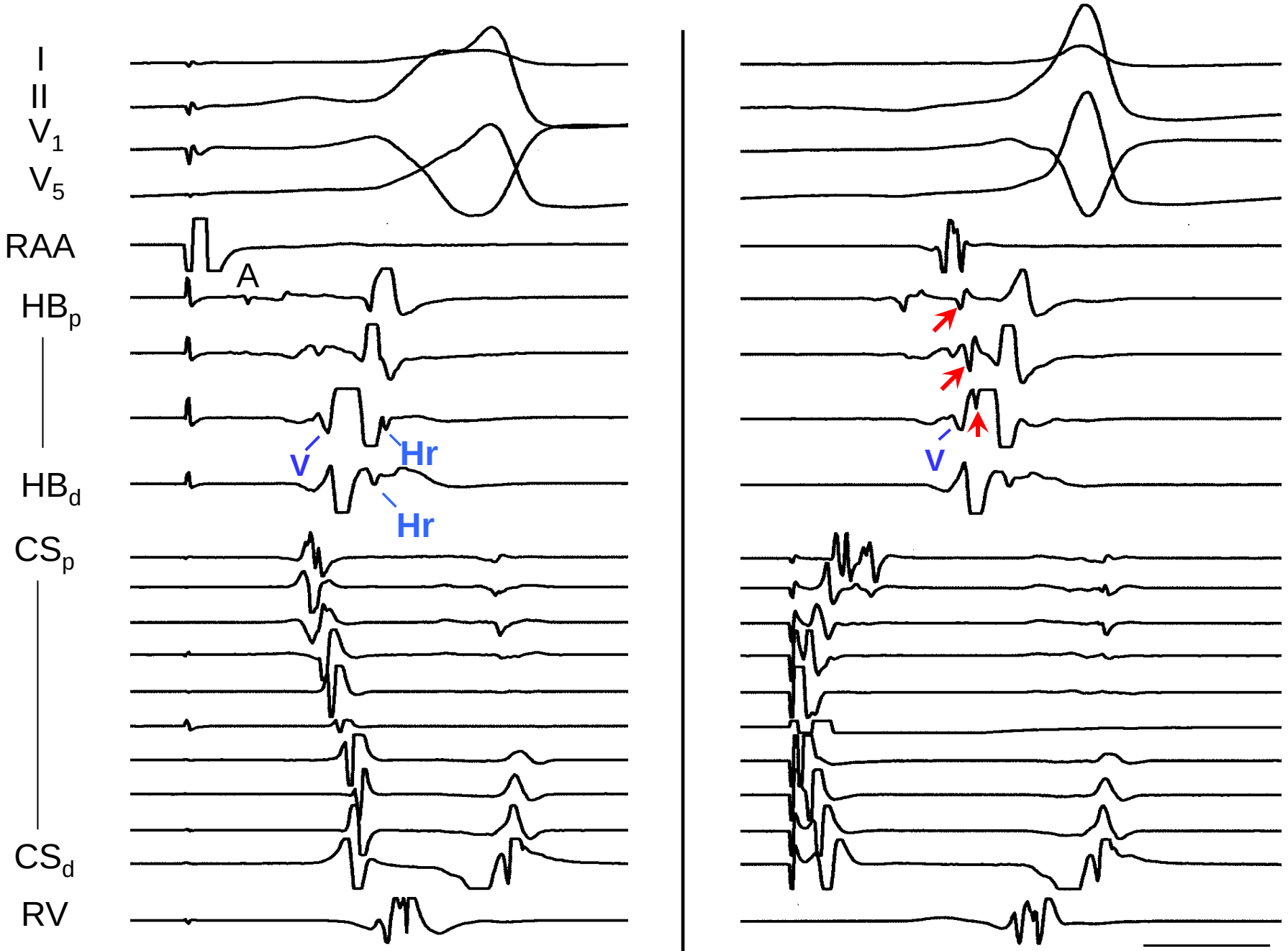


Figure 6.8D

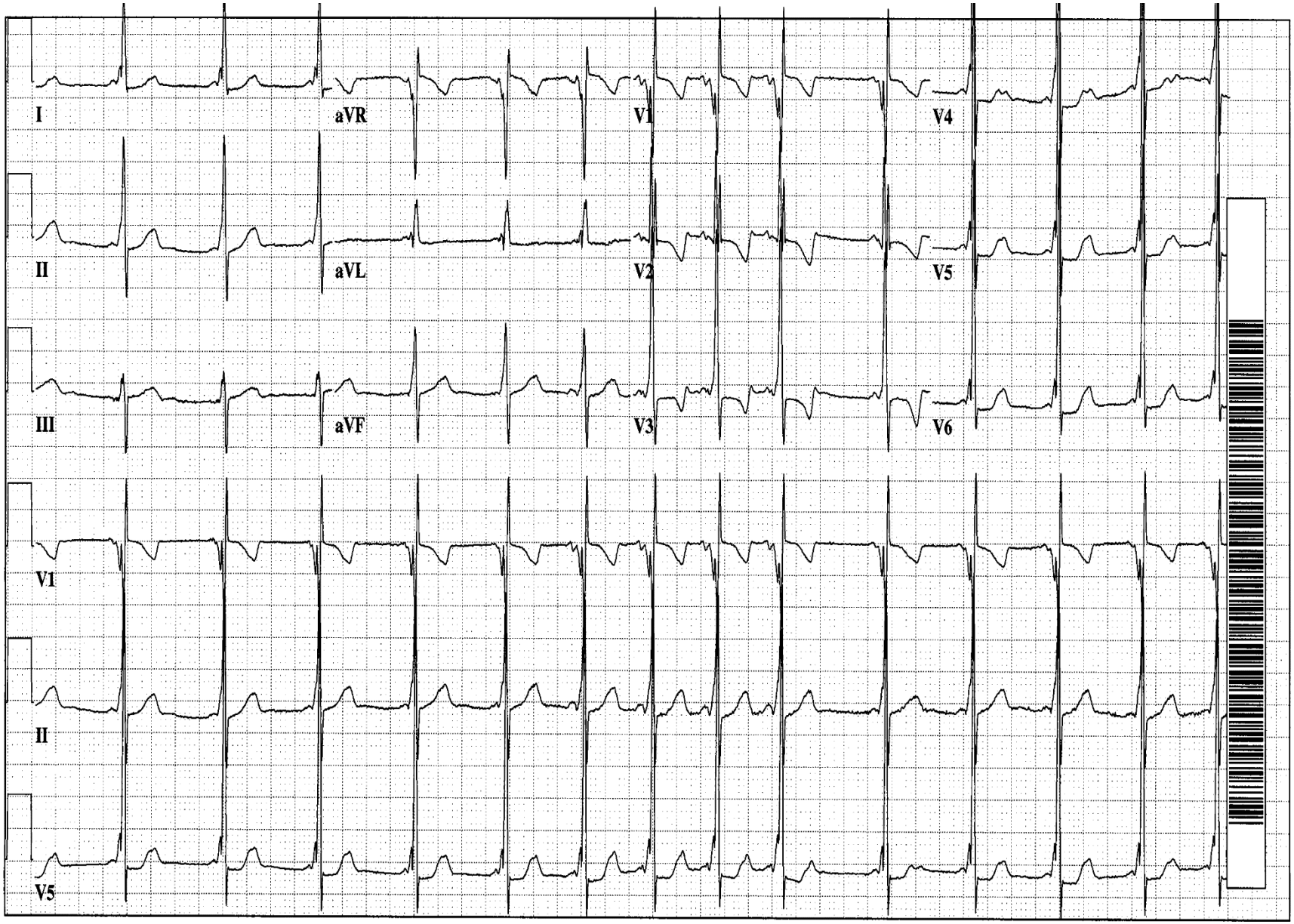

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
V1
II
V5
25mm/s 10mm/mV 150Hz 7.1.1 12SL 231 CID: 1
SID: E1678692 EID:1000 EDT: 13:11 09-MAR-2009 ORDER:
ACCOUNT: E00631001372
Page 1 of 1

Figure. 6.9A

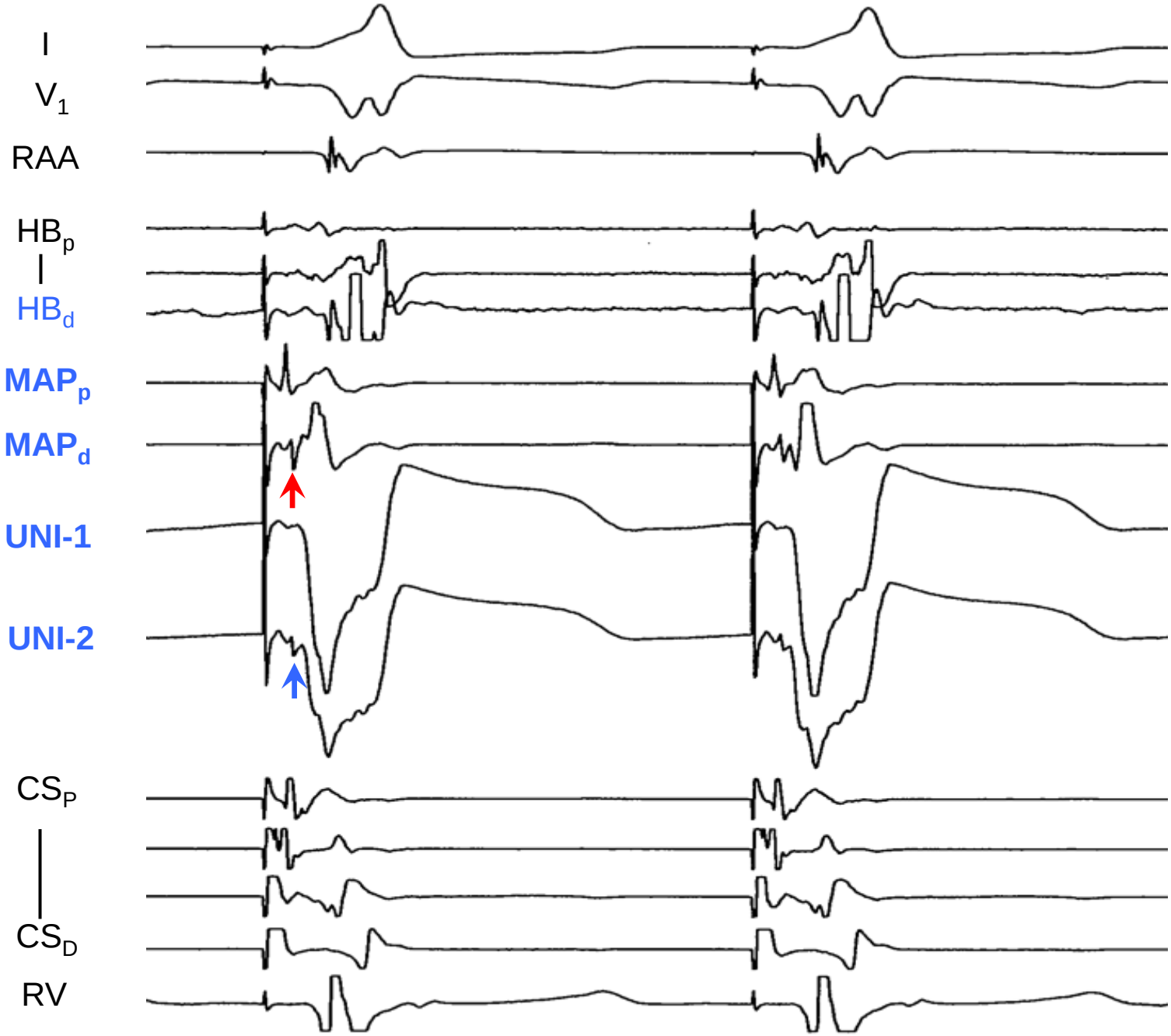


Figure 6.9B

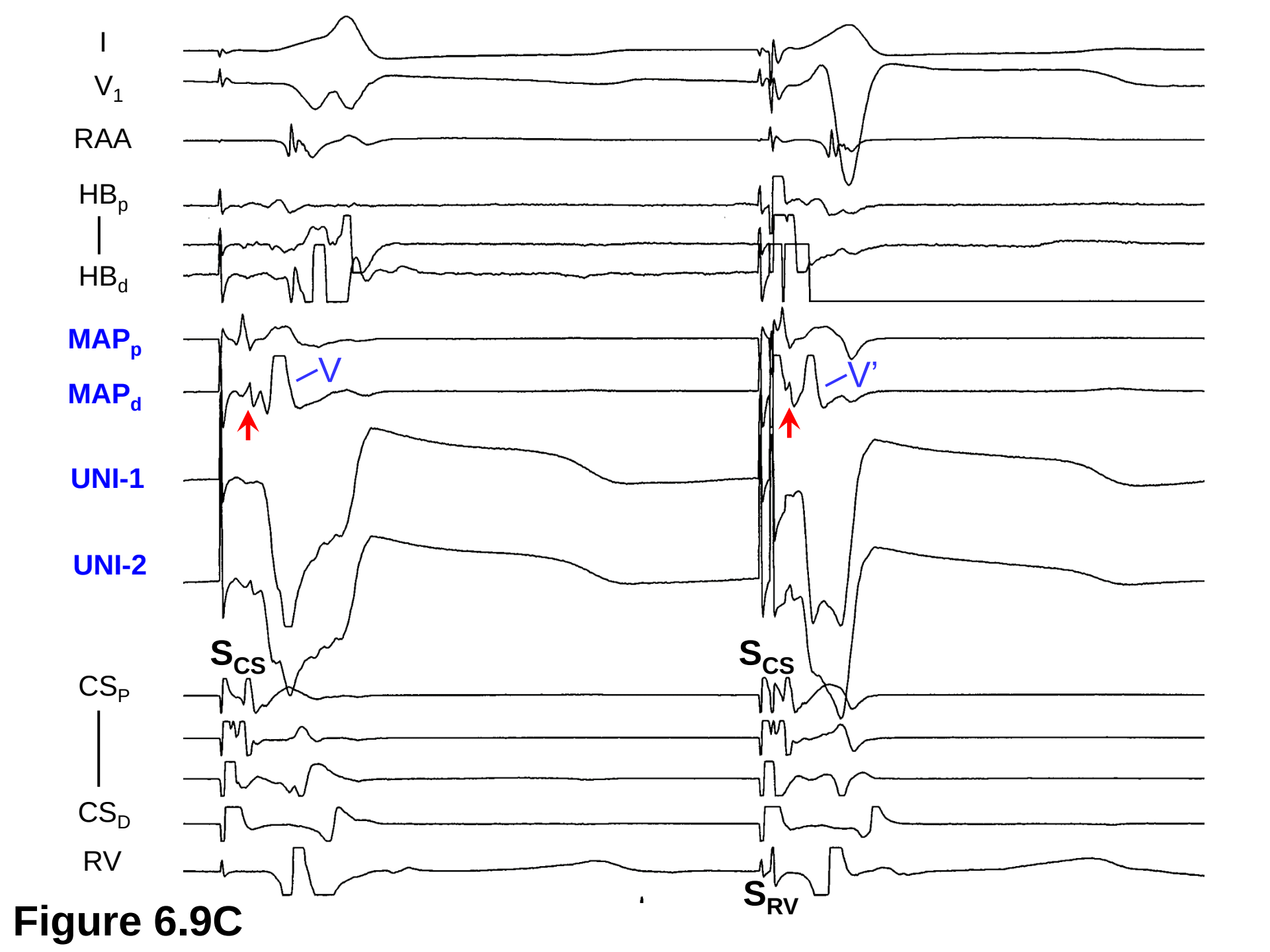
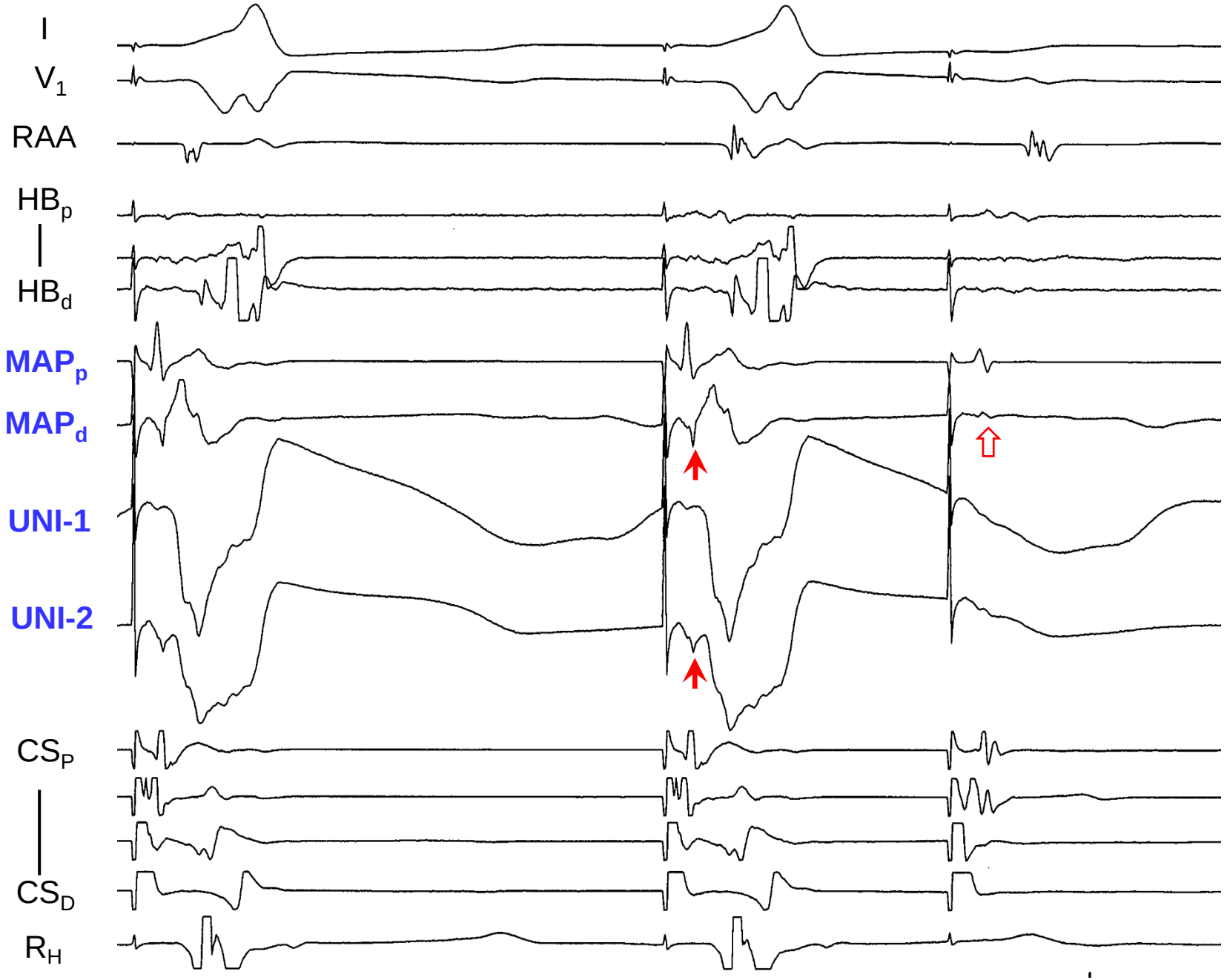


Figure 6.9C



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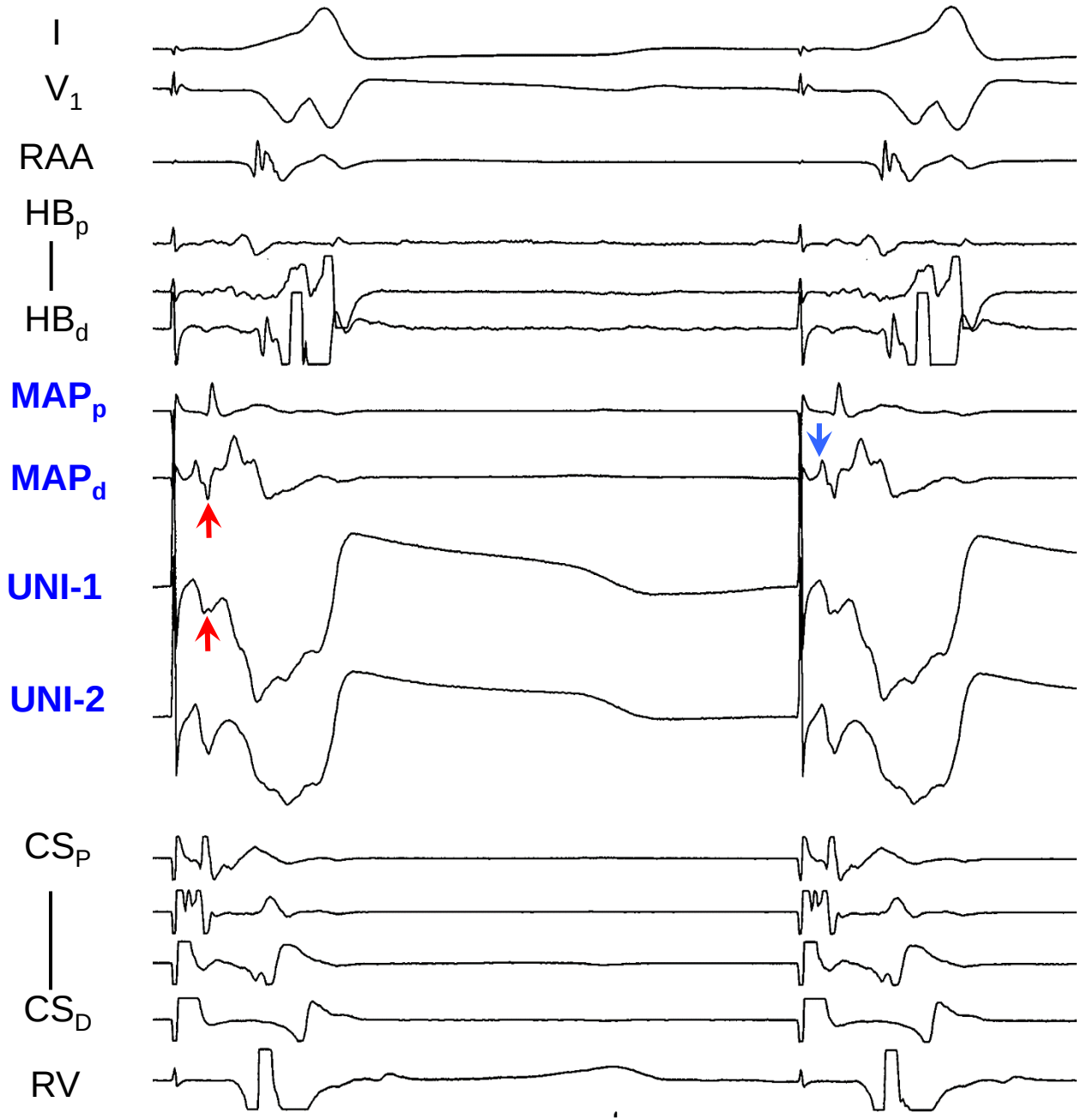


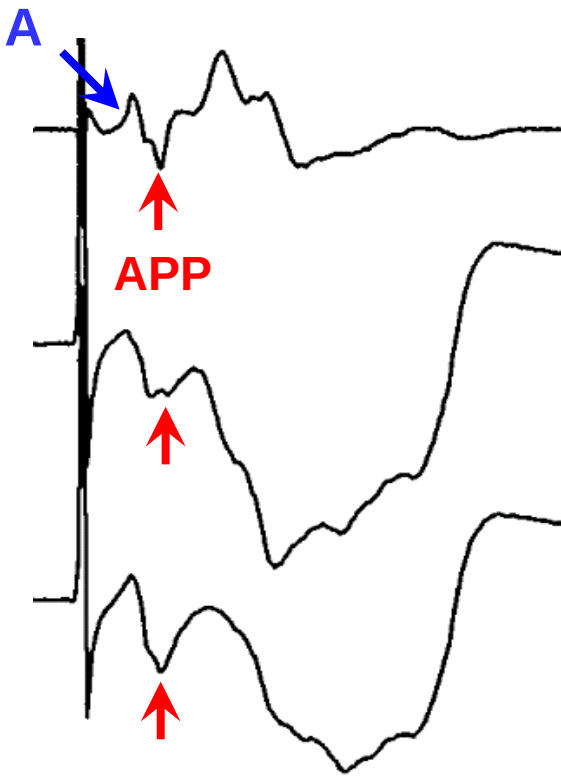


Figure 6.9E

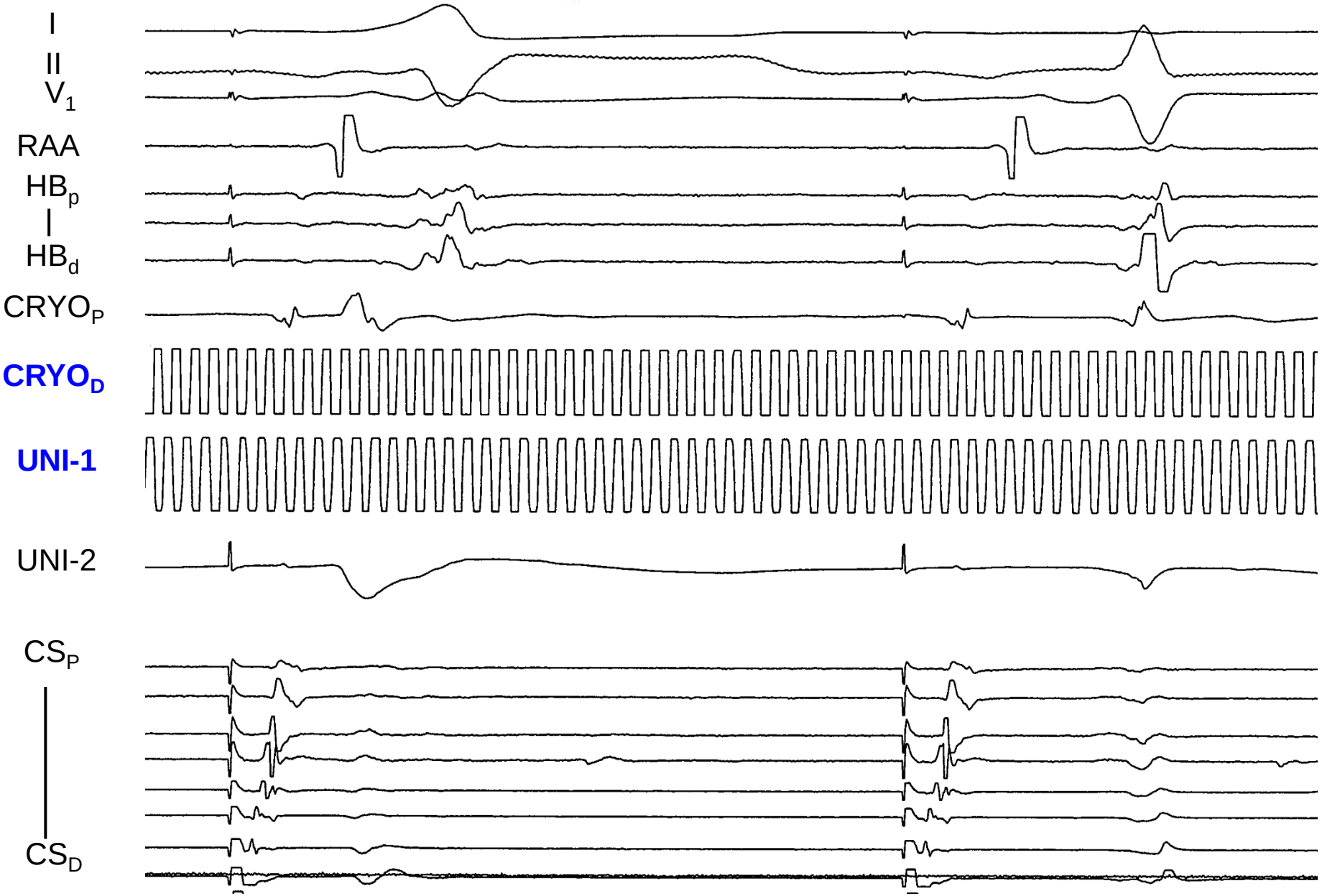


Figure 6.9F

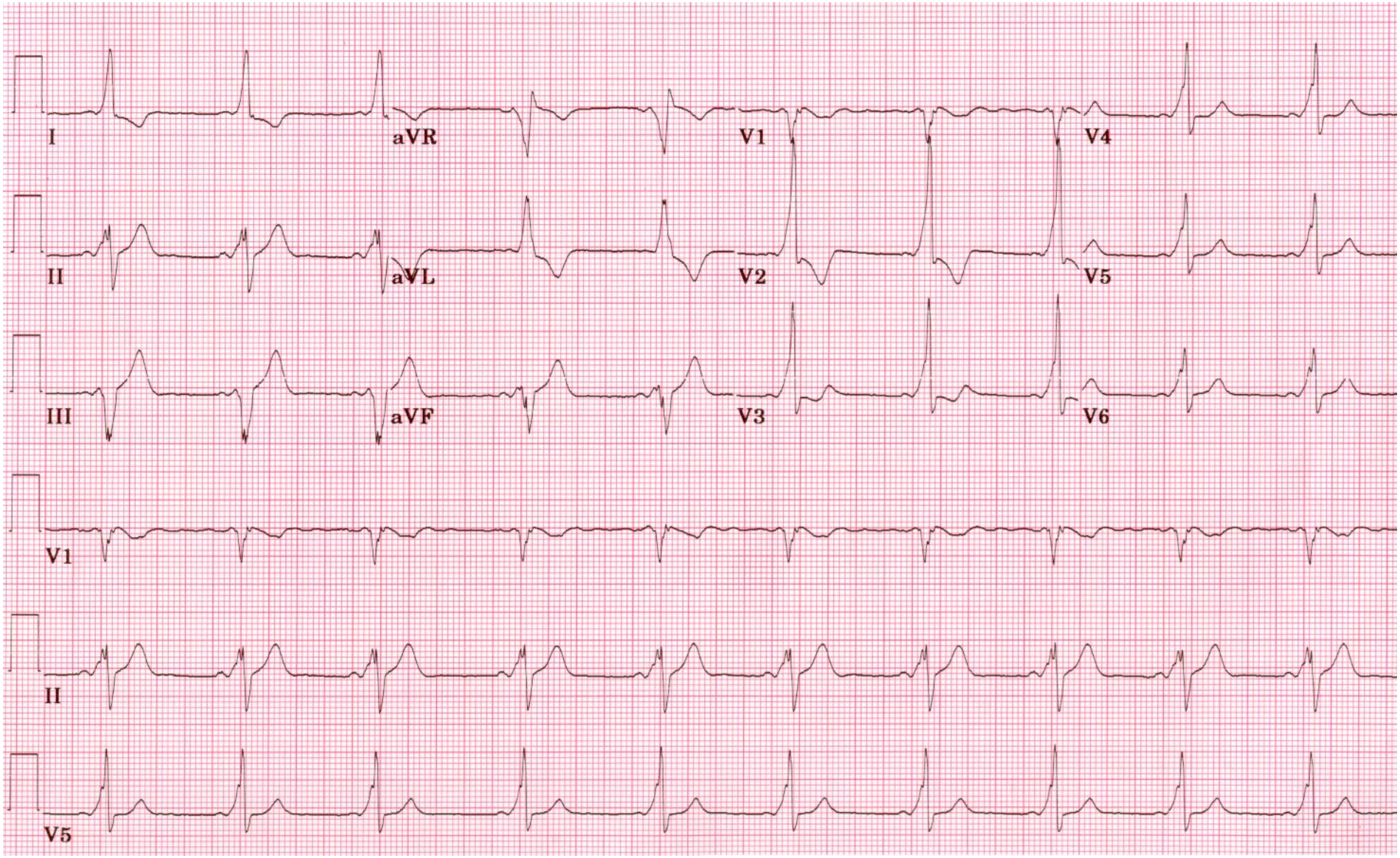
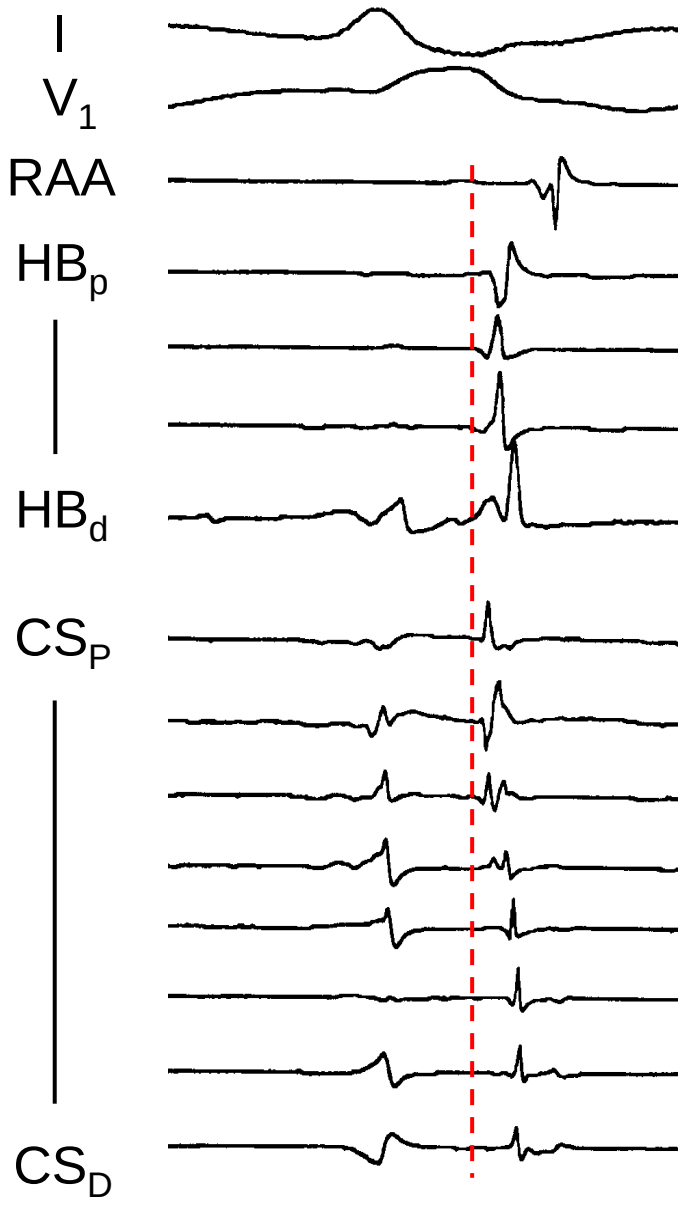


Figure 6.10A



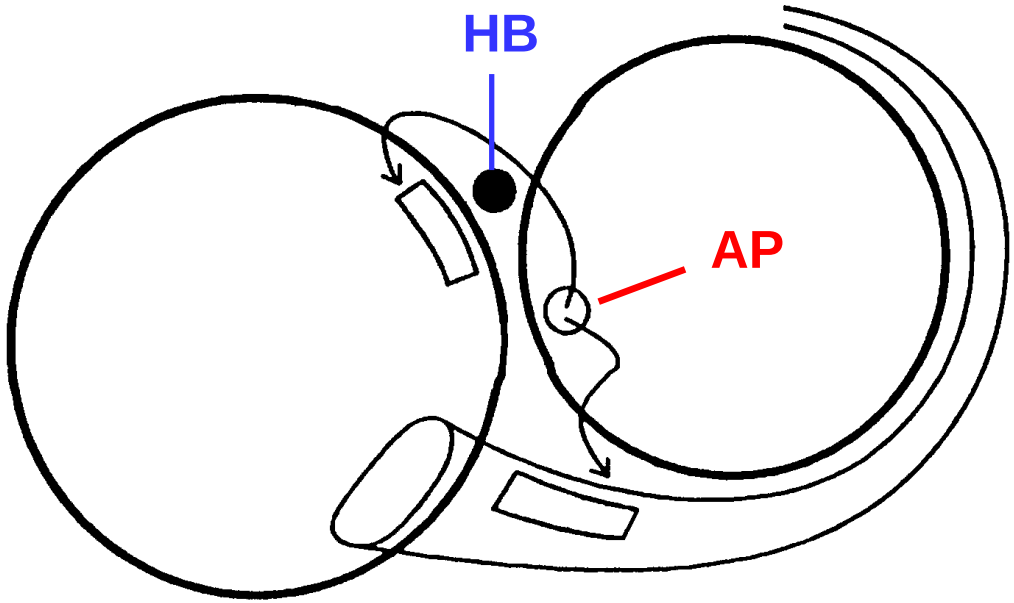


Figure 6.10B

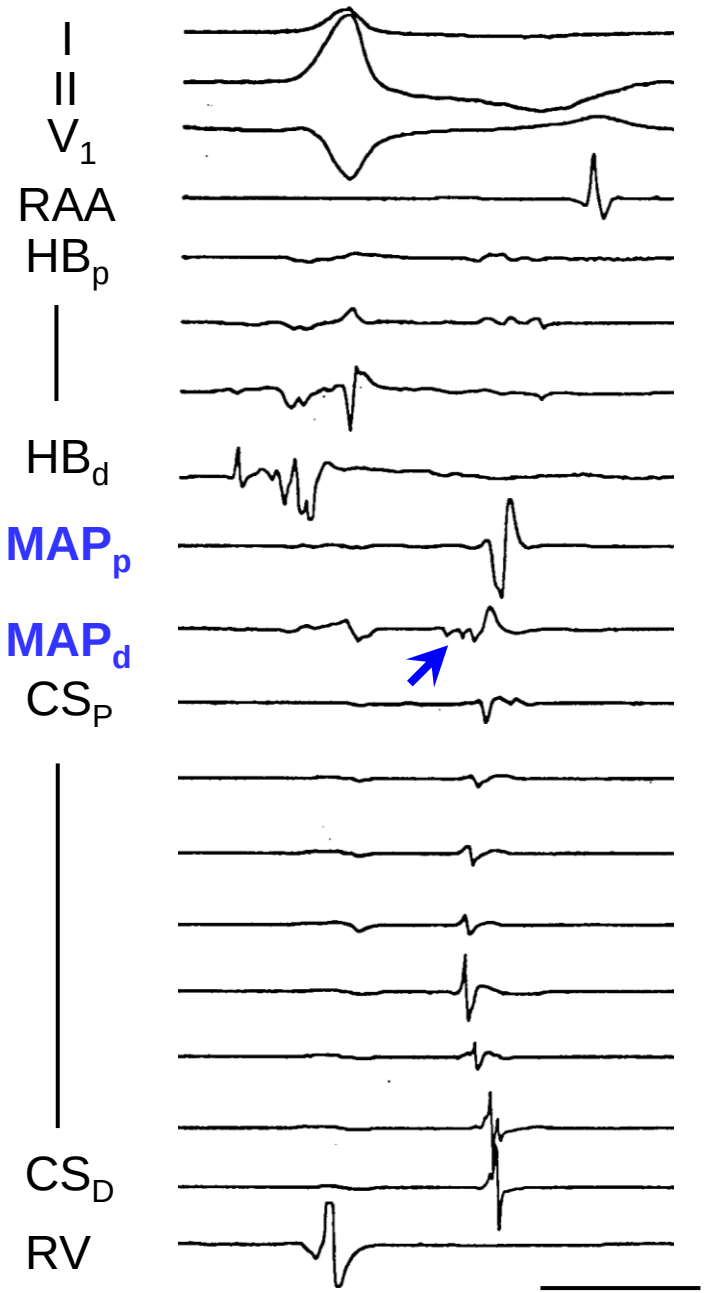
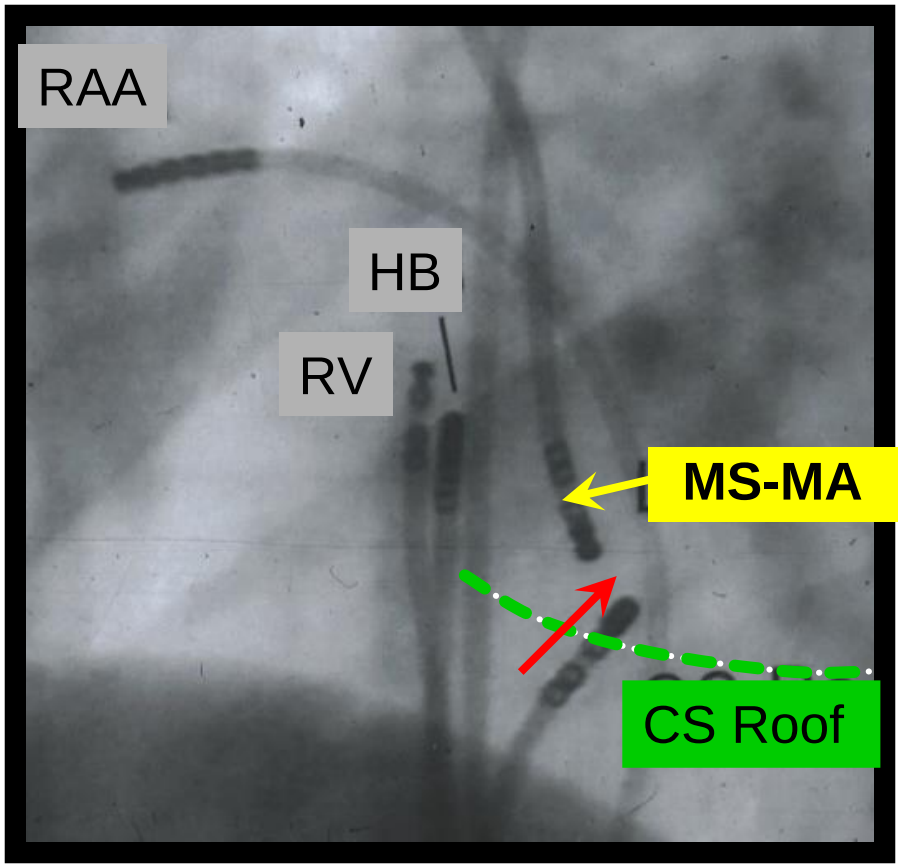

I
II
V1
RAA
HBp
HBd
MAPp
MAPd
CSP
CSD
RV
100 ms

Fig. 6.10C


LAO
RAA
HB
RV
MS-MA
CS Roof

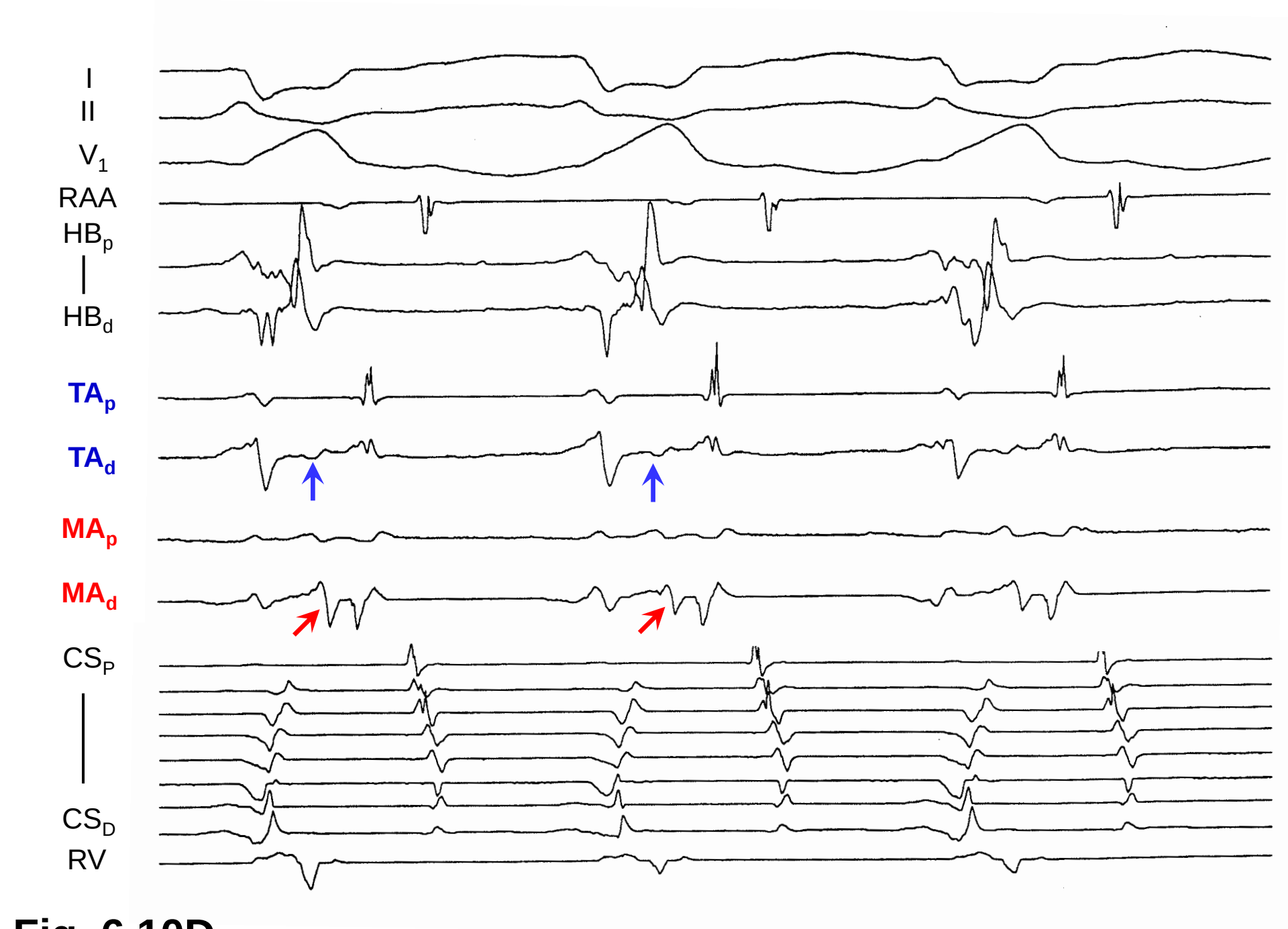


Fig. 6.10D

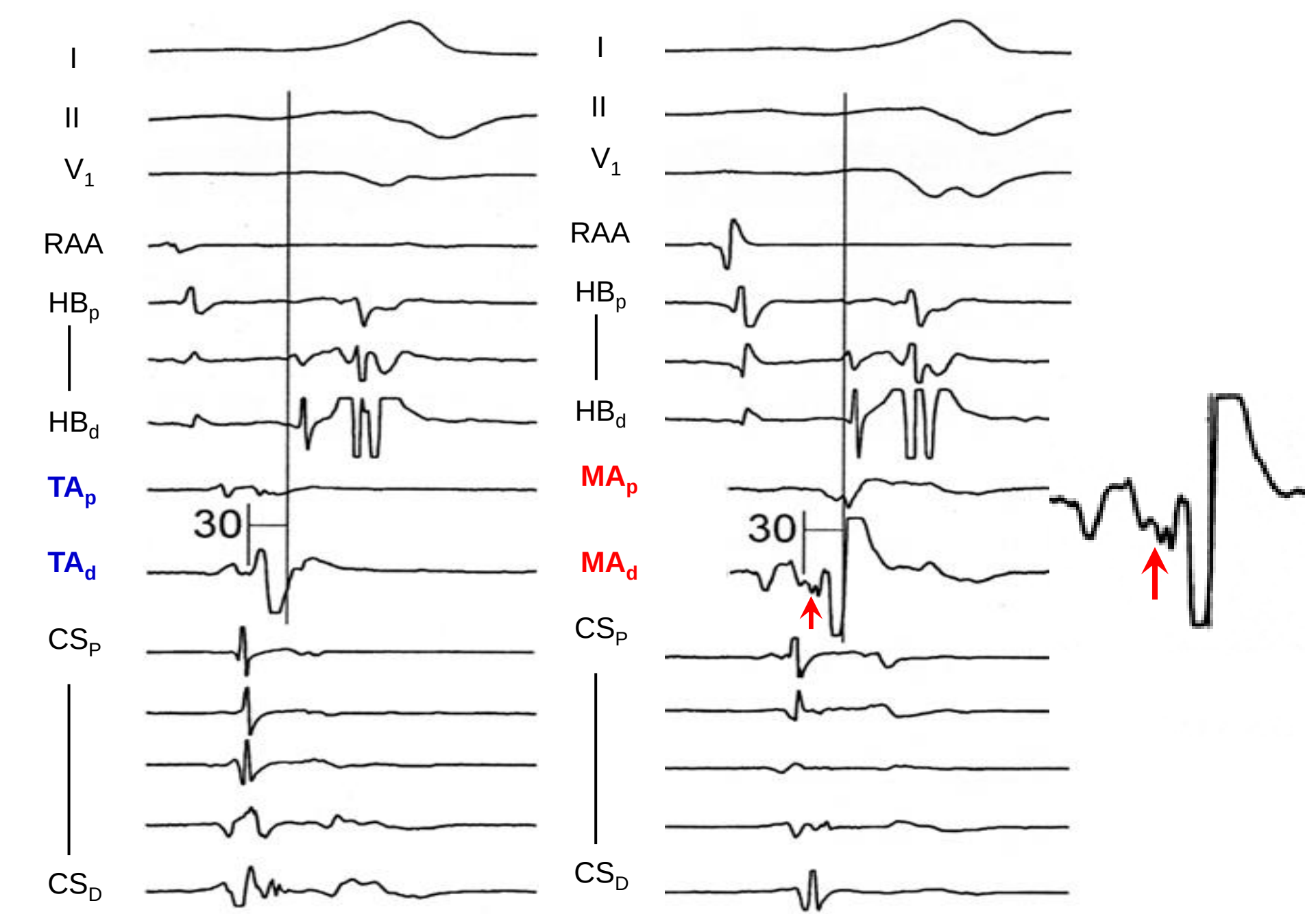

I
II
V1
RAA
HBp
HBd
TAp
30
TAd
CSP
CSD
I
II
V1
RAA
HBp
HBd
MAp
30
MAd
CSP
CSD
100 ms

Fig. 6.10E

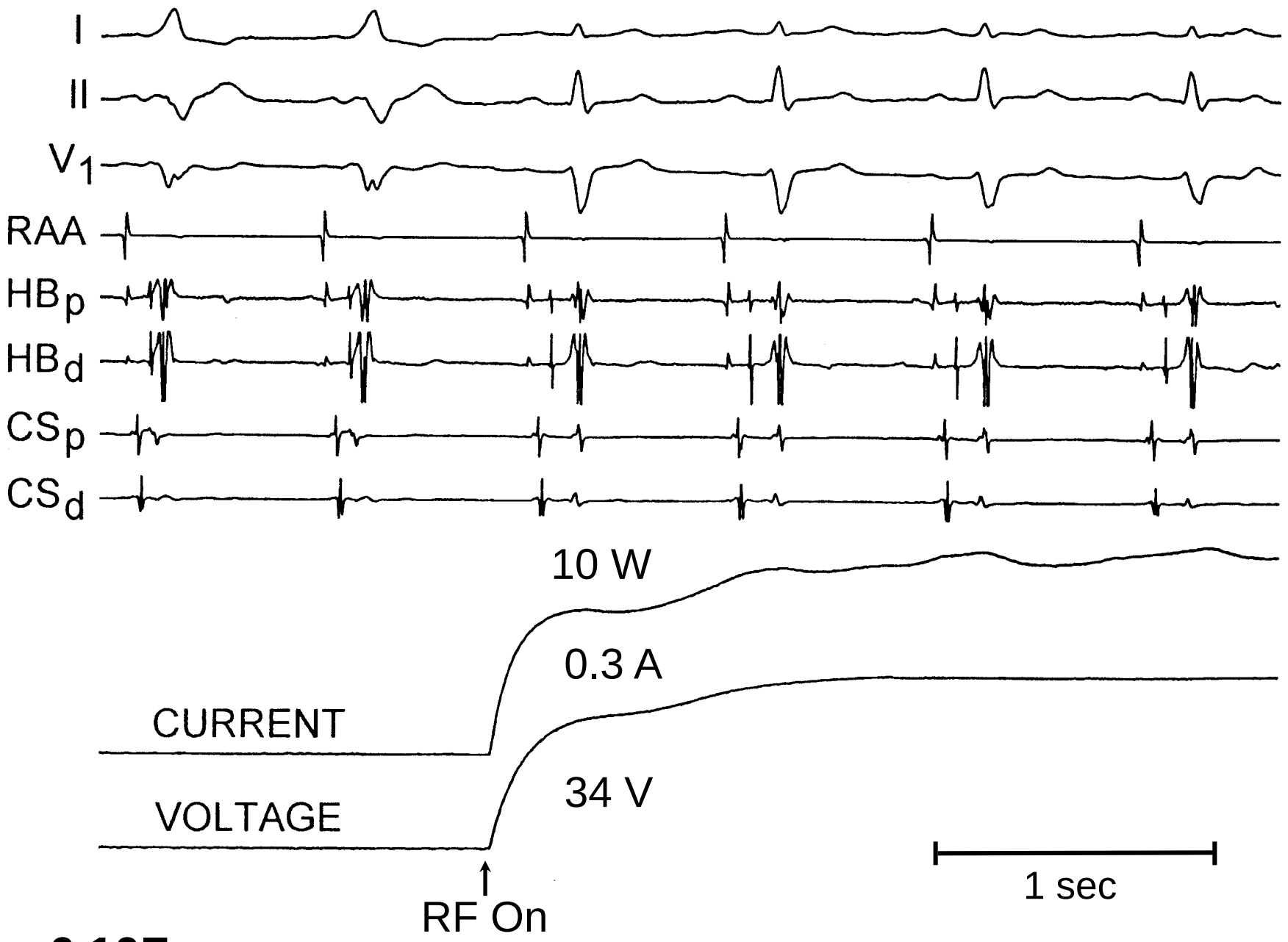

I
II
V1
RAA
HBp
HBd
CSp
CSd
10 W
0.3 A
CURRENT
34 V
VOLTAGE
RF On
1 sec

Fig. 6.10F

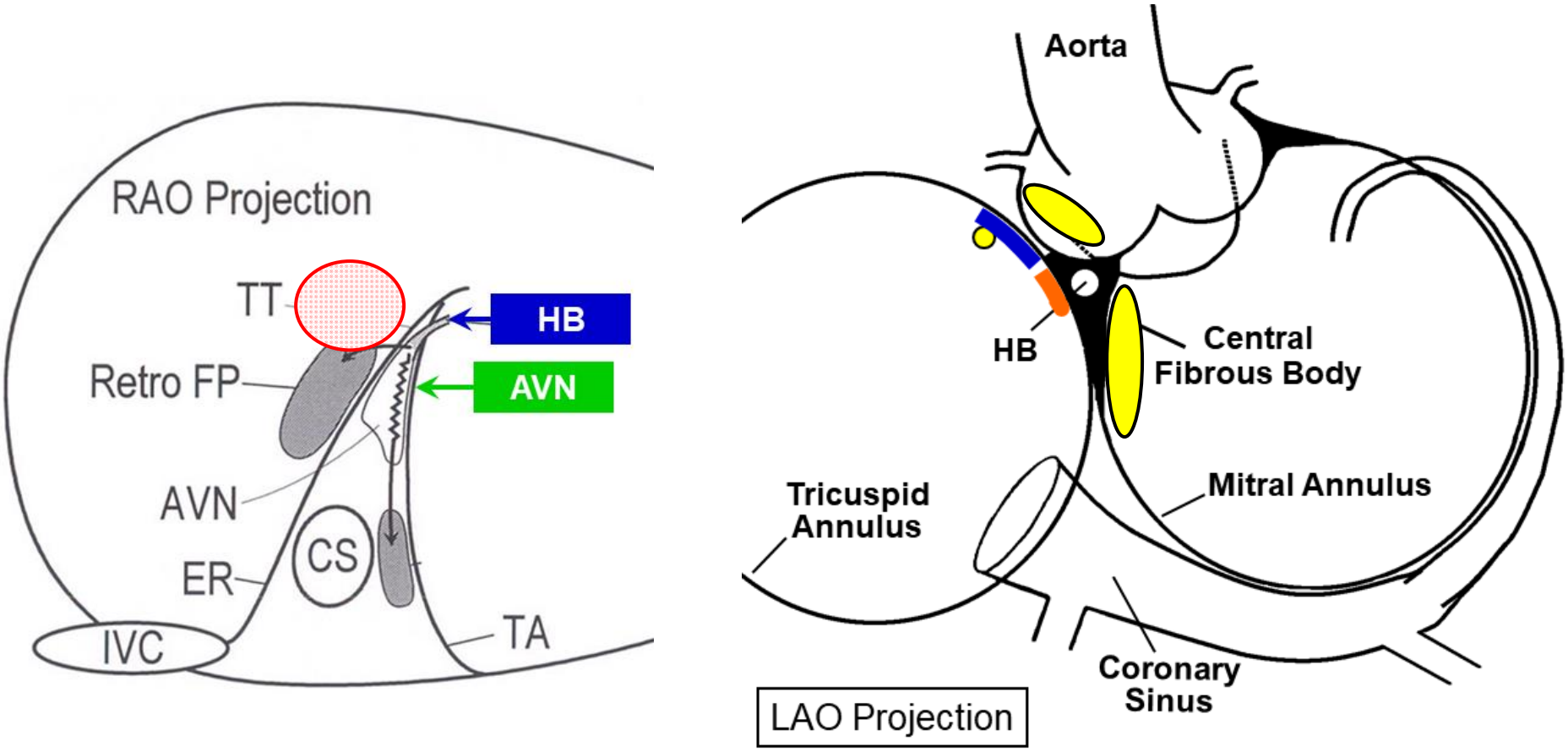

RAO Projection
TT
HB
Retro FP
AVN
AVN
CS
ER
IVC
TA
Aorta
HB
Central
Fibrous Body
Tricuspid
Annulus
Mitral Annulus
Coronary
Sinus
LAO Projection

Figure 6.11A

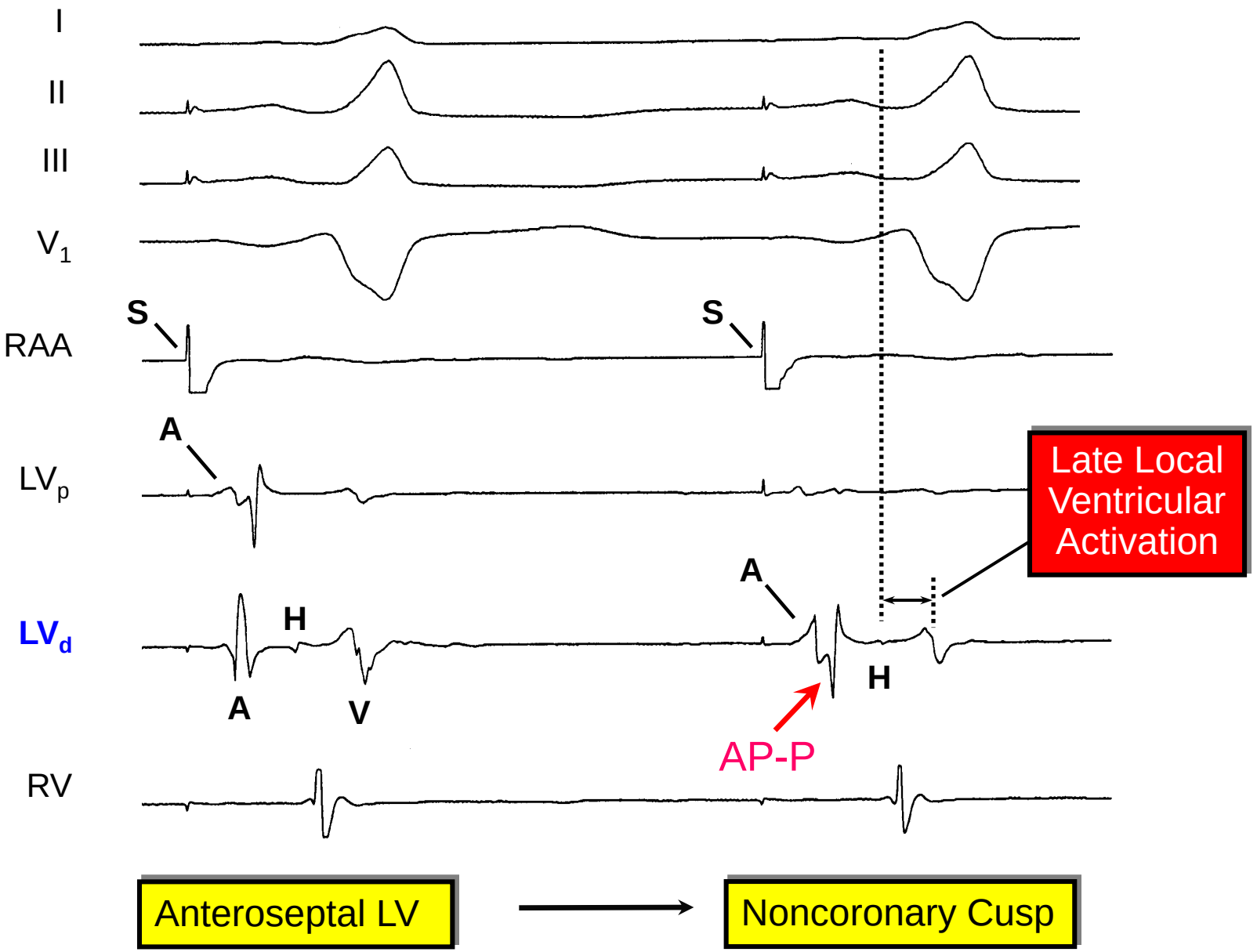
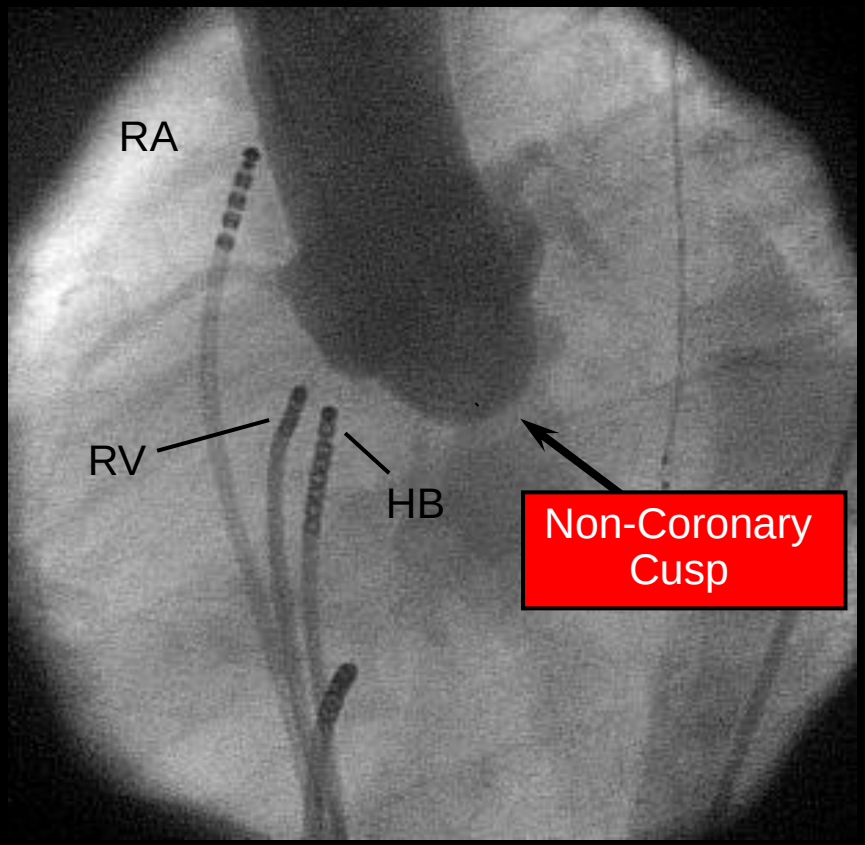
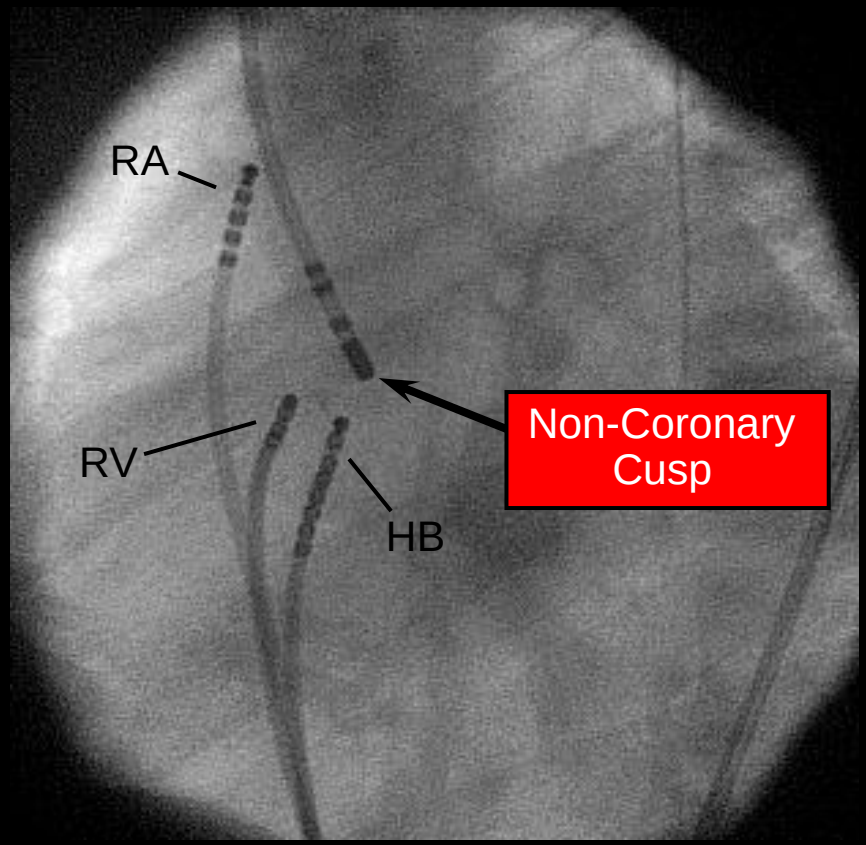

I
II
III
V1
RAA
S
S
LVp
A
LVd
A
H
A
V
A
H
AP-P
RV
Late Local Ventricular Activation
Anteroseptal LV
Noncoronary Cusp

Figure 6.11B

Aortogram

Pullback from LV
to Aortic Cusp





LAO Projection

Figure 6.11C

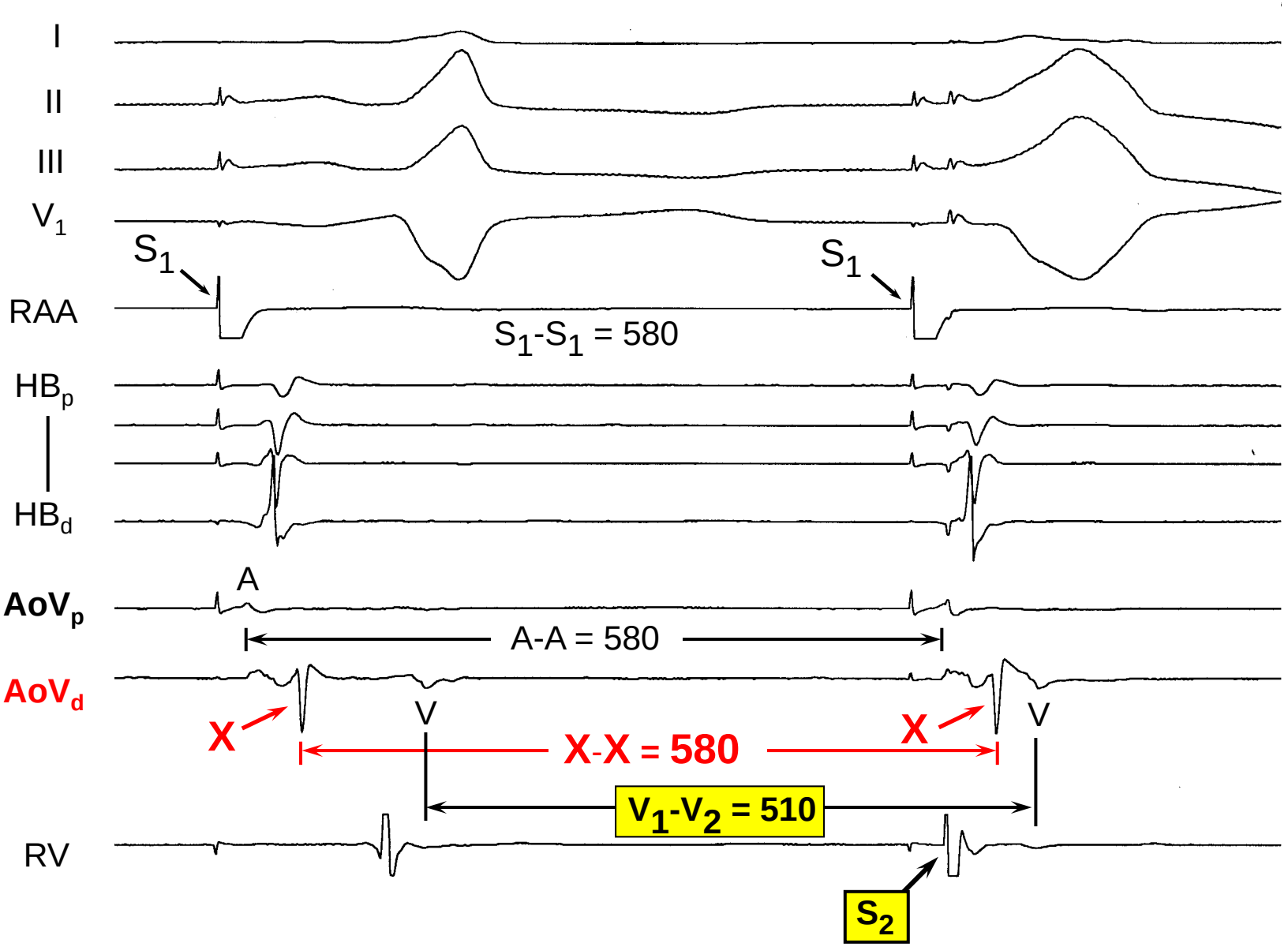

I
II
III
V1
S1
S1
RAA
S1-S1 = 580
HBp
HBd
A
AoVp
A-A = 580
AoVd
X
V
X-X = 580
X
V
V1-V2 = 510
RV
S2

Figure 6.11D

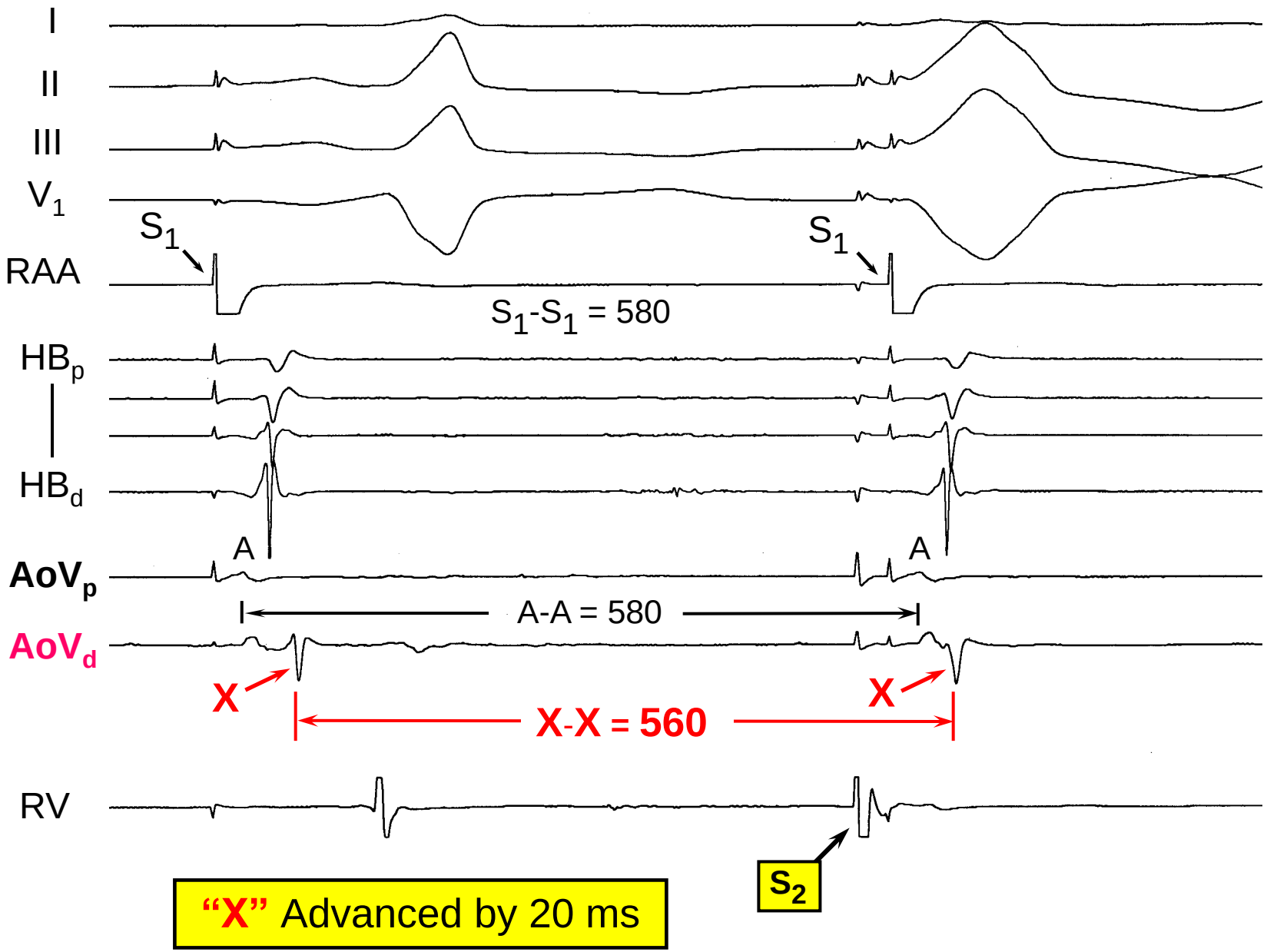

I
II
III
V1
S1
S1
RAA
S1-S1 = 580
HBp
HBd
A
A
AoVp
A-A = 580
AoVd
X
X
X-X = 560
RV
S2
"X" Advanced by 20 ms

Figure 6.11E

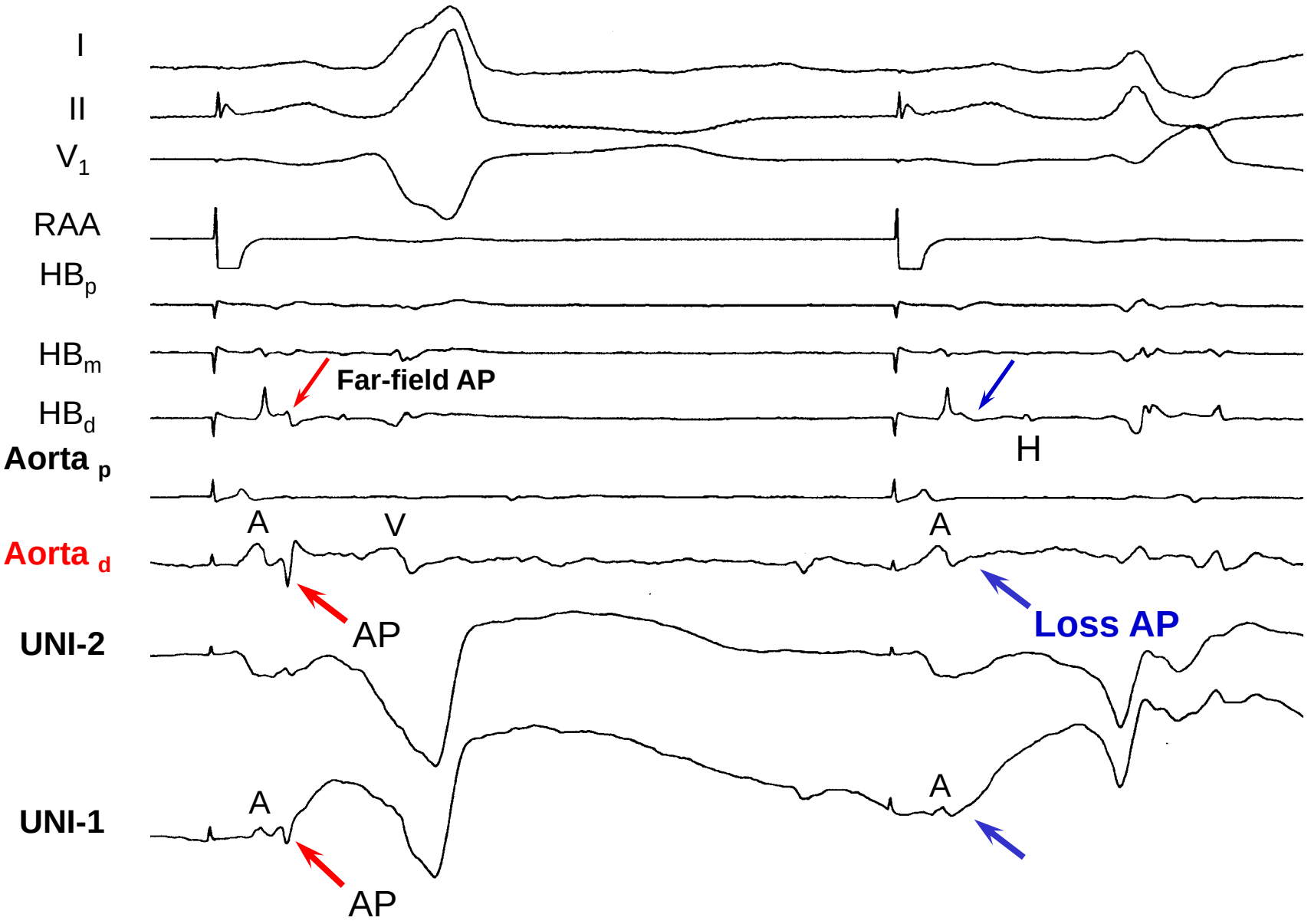

I
II
V1
RAA
HBp
HBm
HBd
Aorta p
Aorta d
UNI-2
UNI-1
Far-field AP
H
A
V
A
AP
Loss AP
A
A
AP

Figure 6.11F

Preexcitation Pattern Suggesting Anteroseptal AP

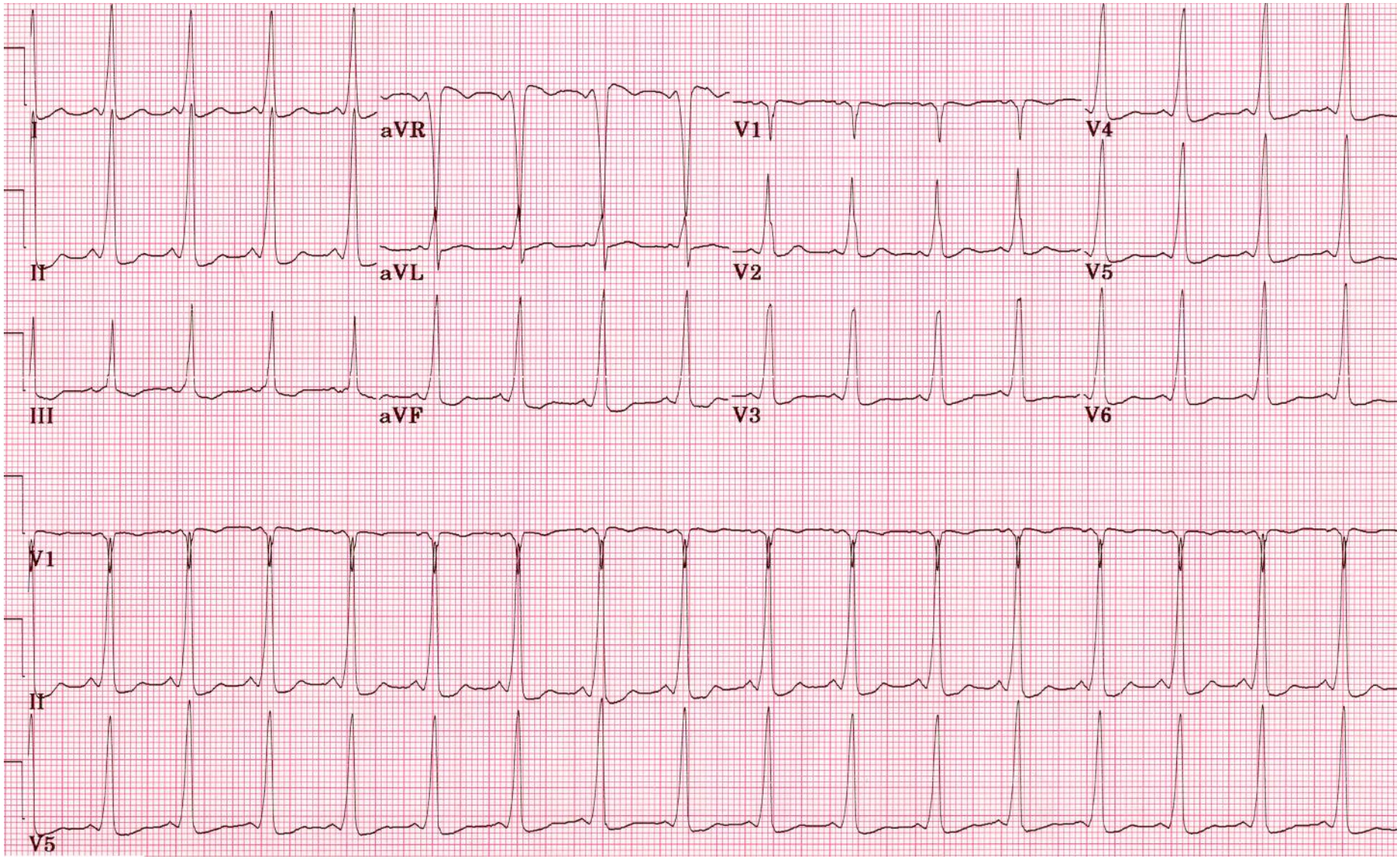
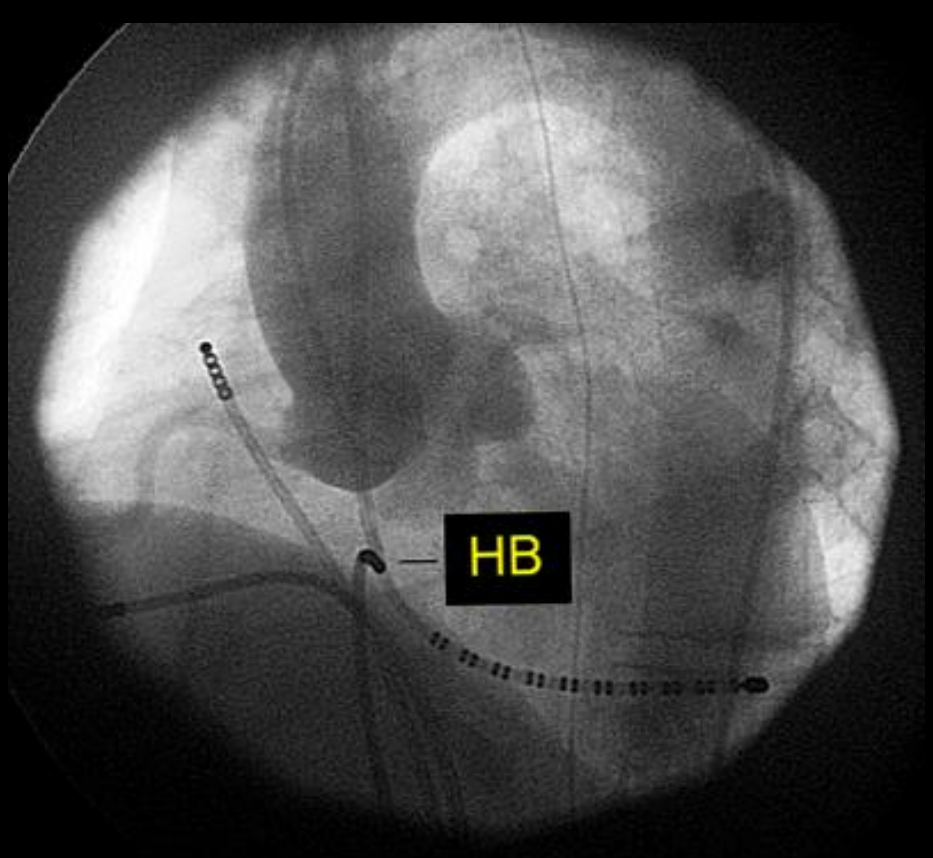


Figure. 6.12A

Catheter below the Right Coronary Cusp



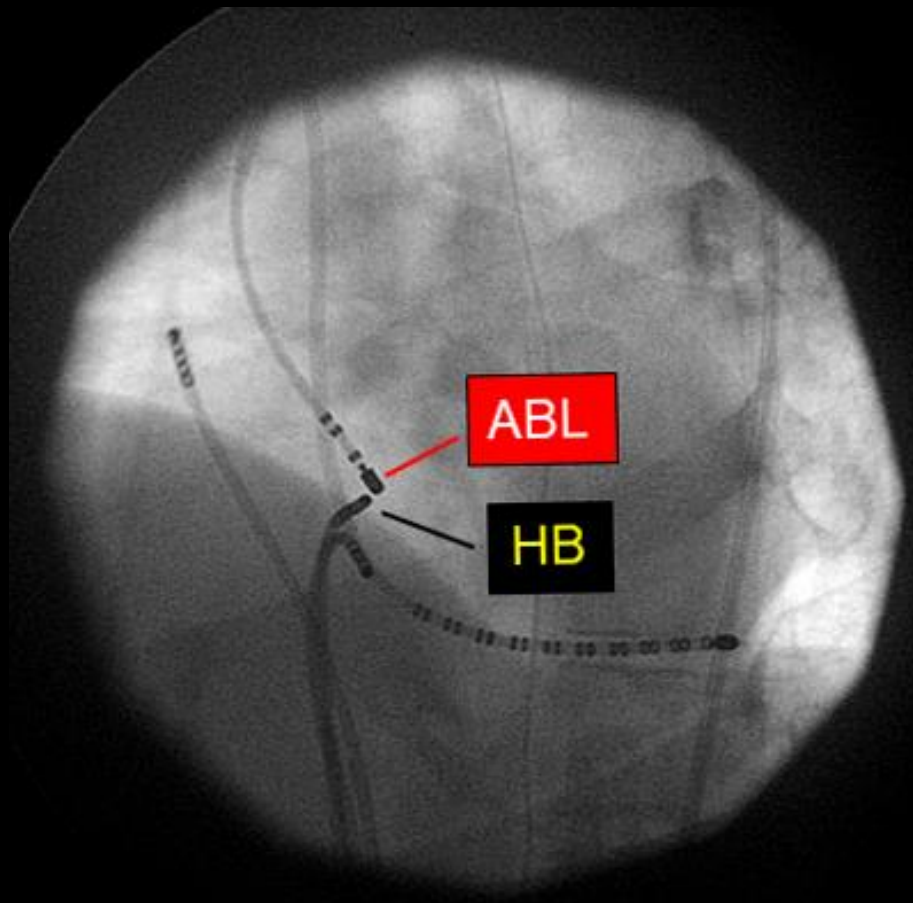
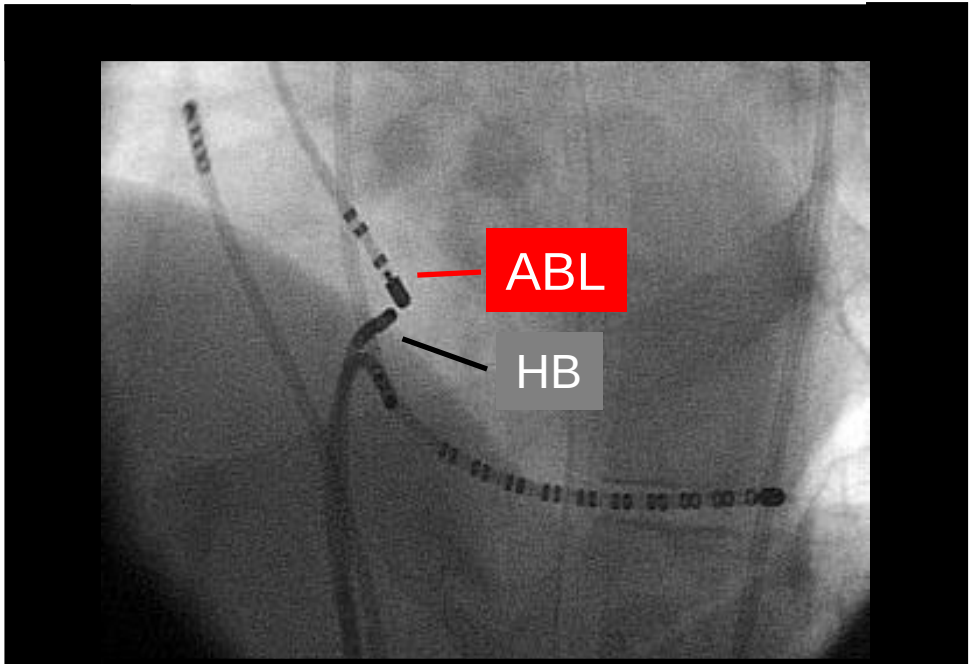


Figure 6.12B


ABL
HB

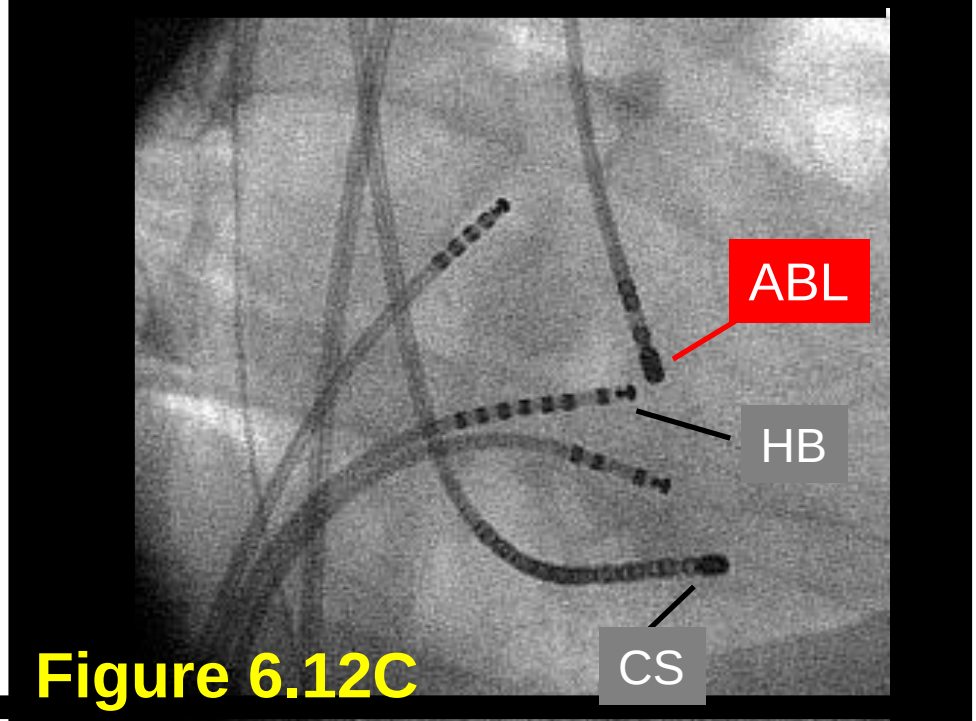
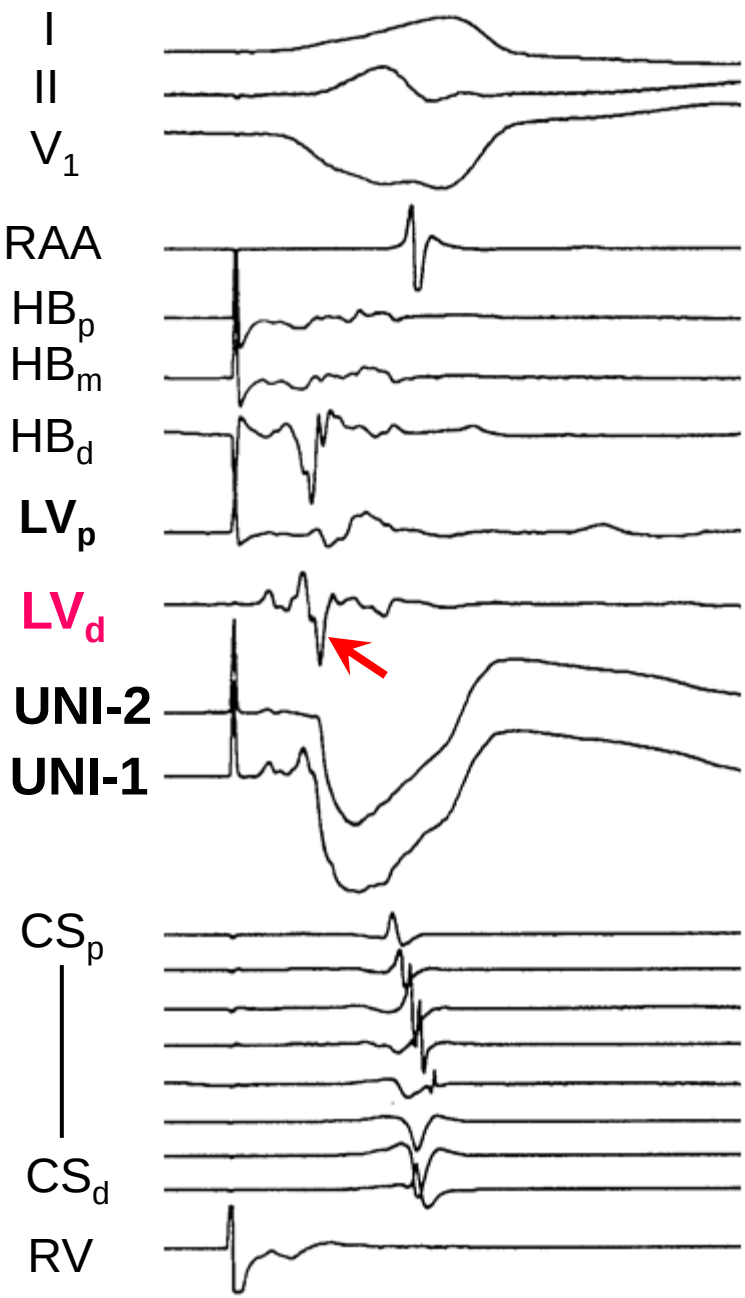
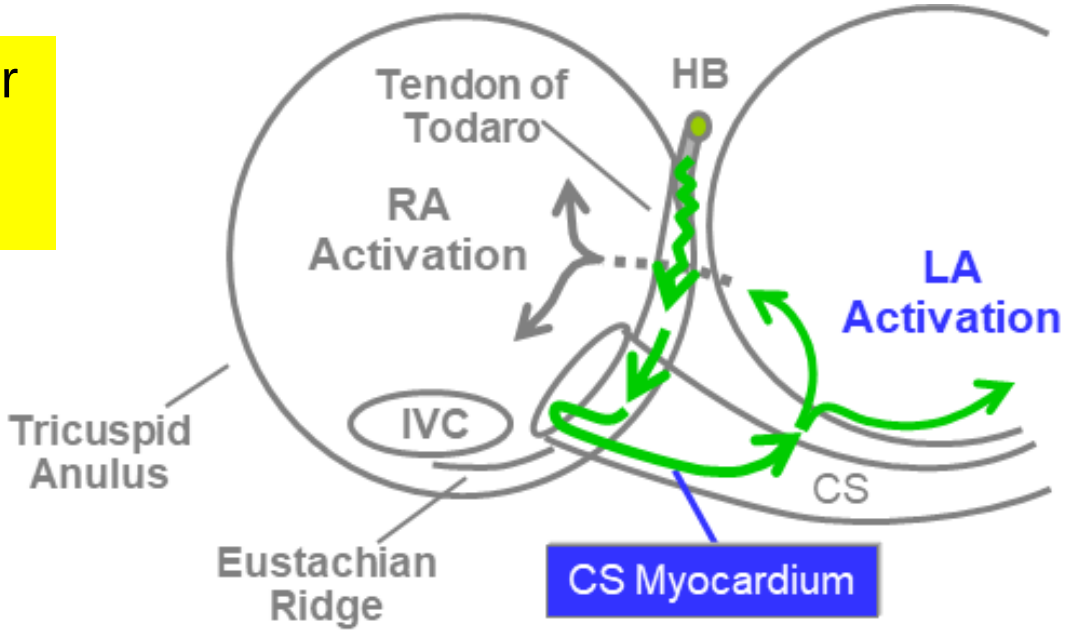

ABL
HB
CS

Figure 6.12C


I
II
V1
RAA
HBp
HBm
HBd
LVp
LVd
UNI-2
UNI-1
CSp
CSd
RV

Retrograde Conduction over Slow Pathway: (Right Inferior Extension)



Retrograde Conduction over an Epicarida PS-AP

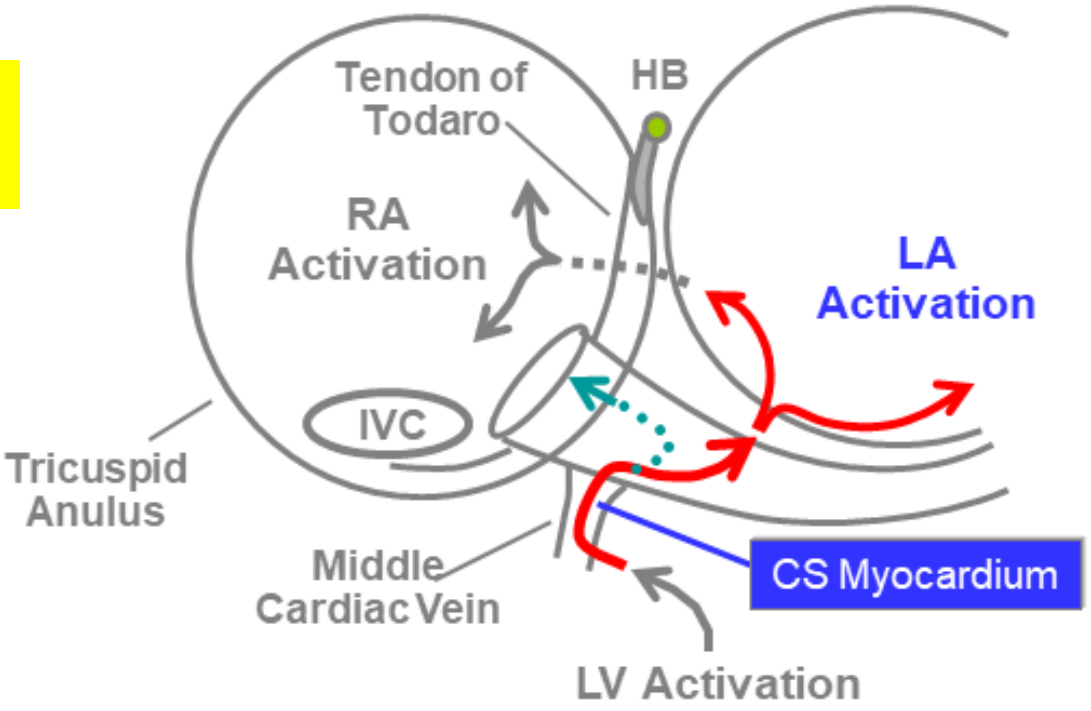


Figure 6.13A

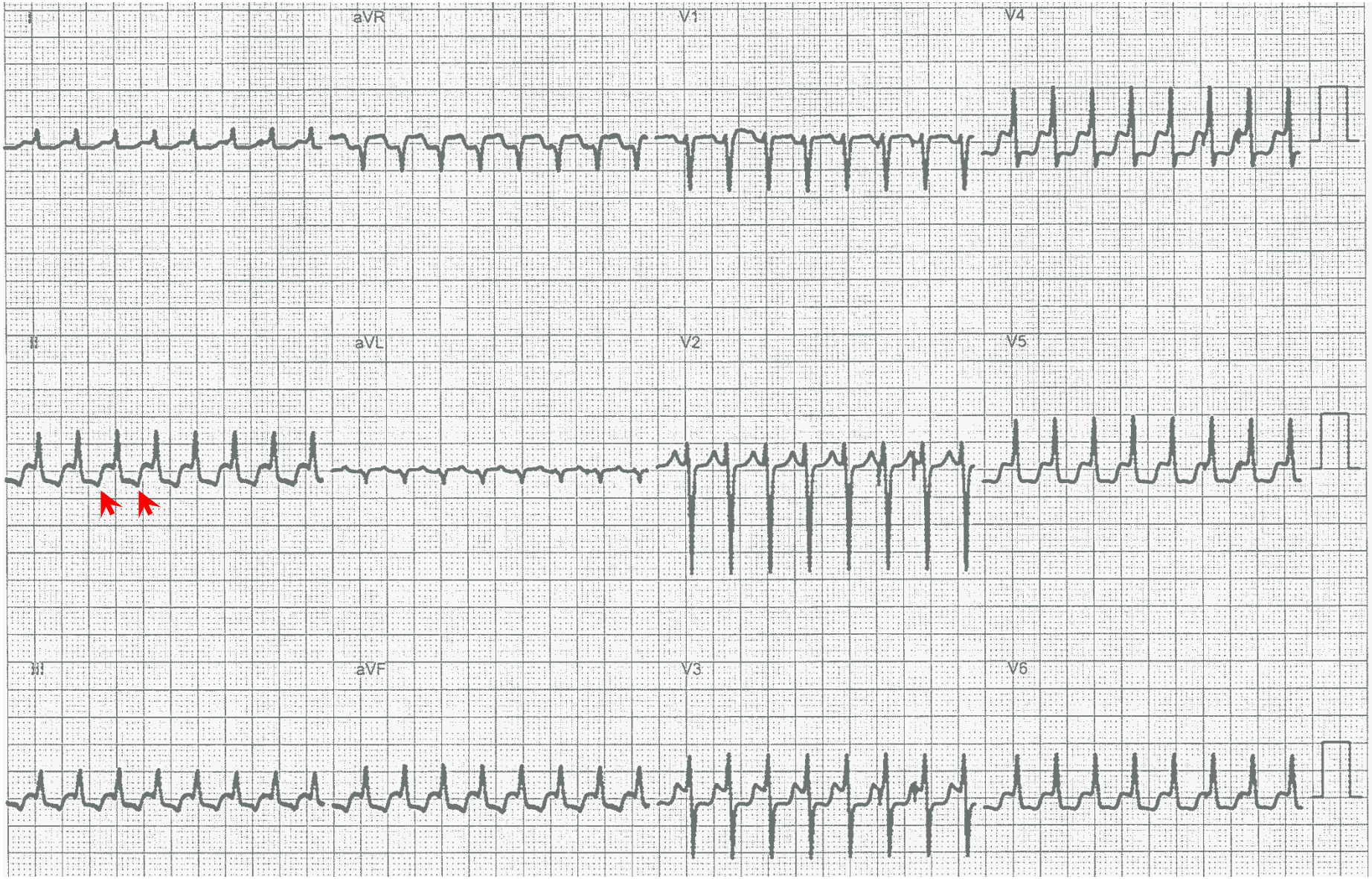


Figure 6,13B

SVT-1

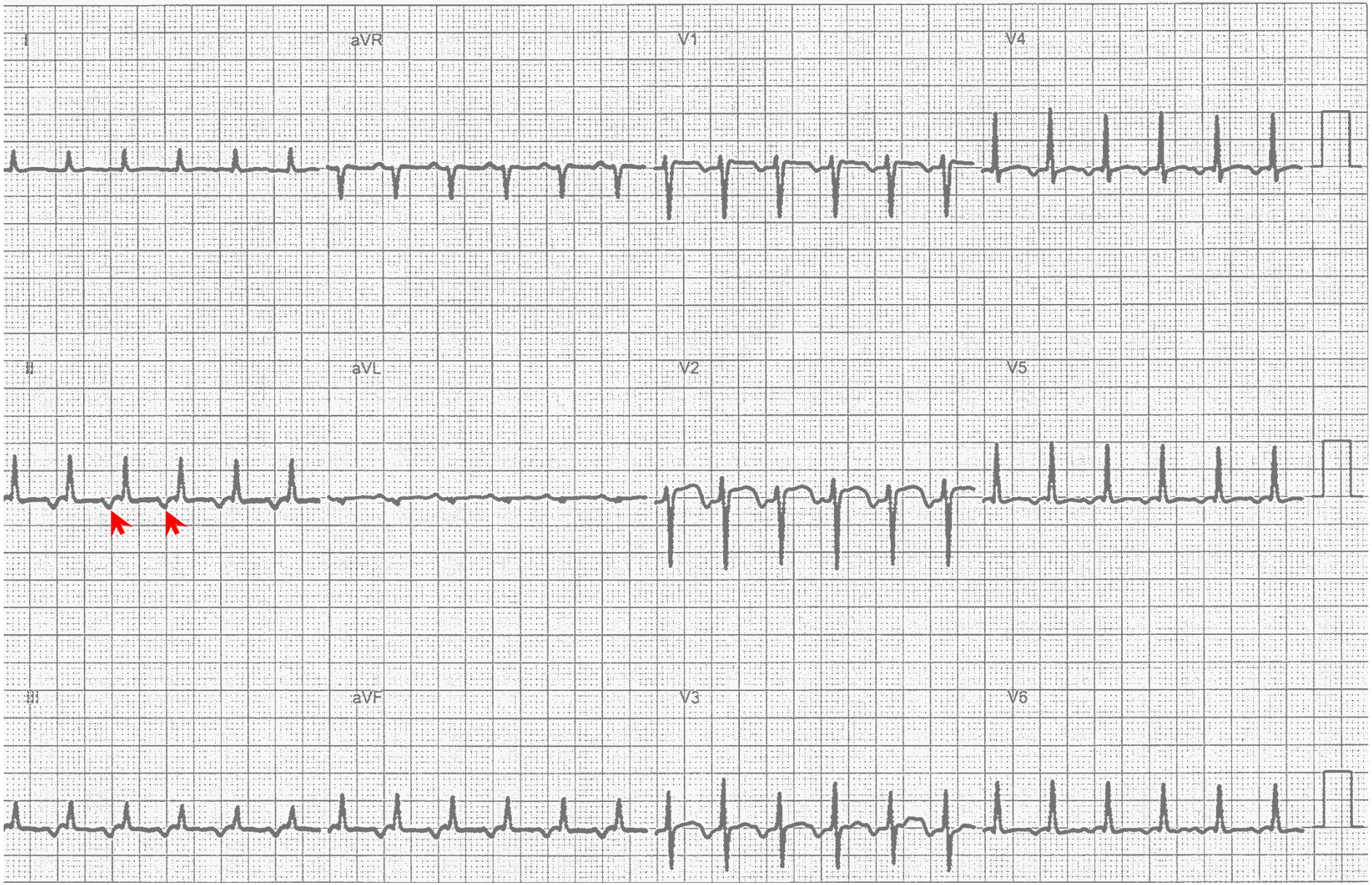


Figure 6.13C

SVT-2

SVT-1

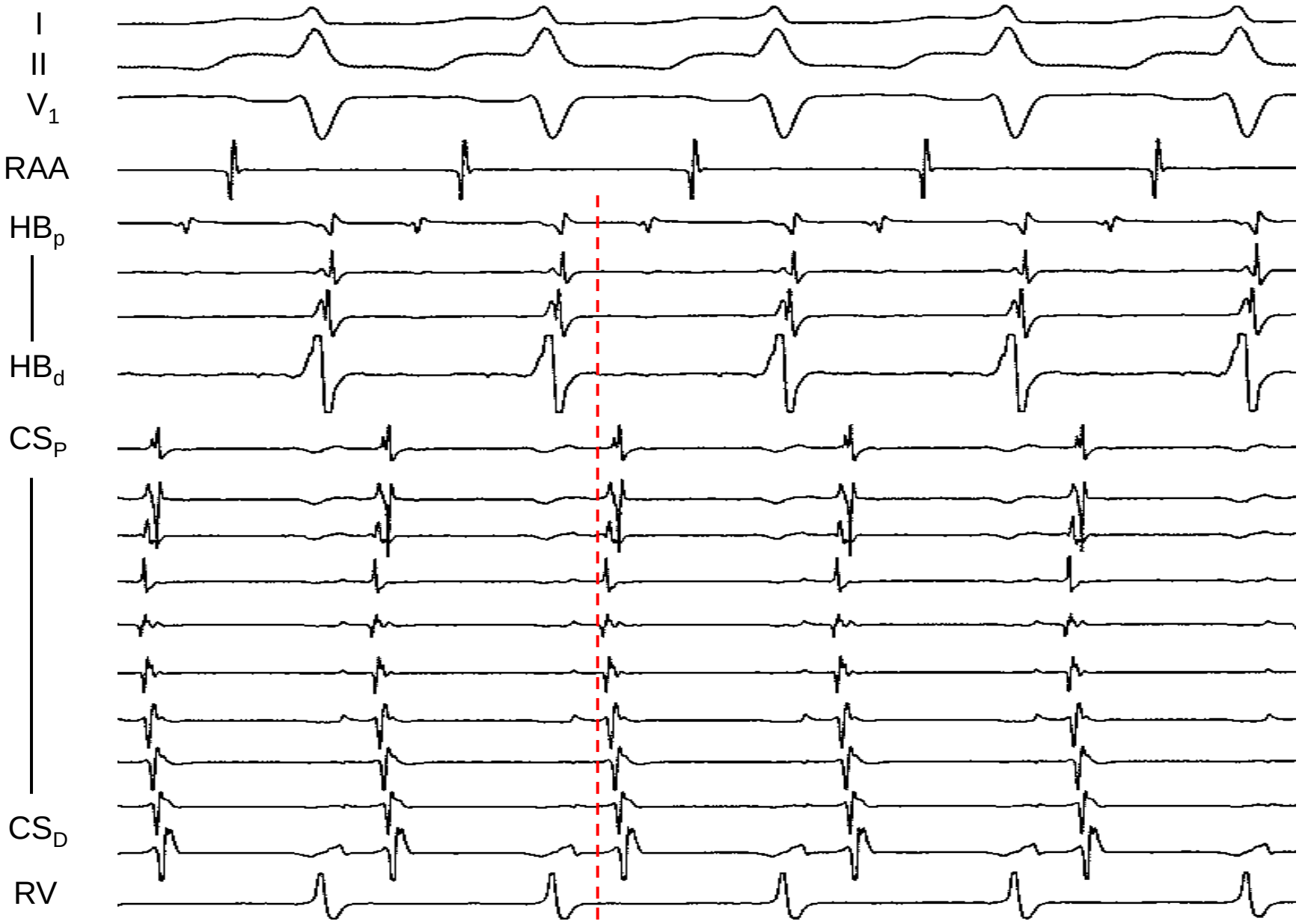


Figure 6.13D

SVT-2

Figure 6.13E

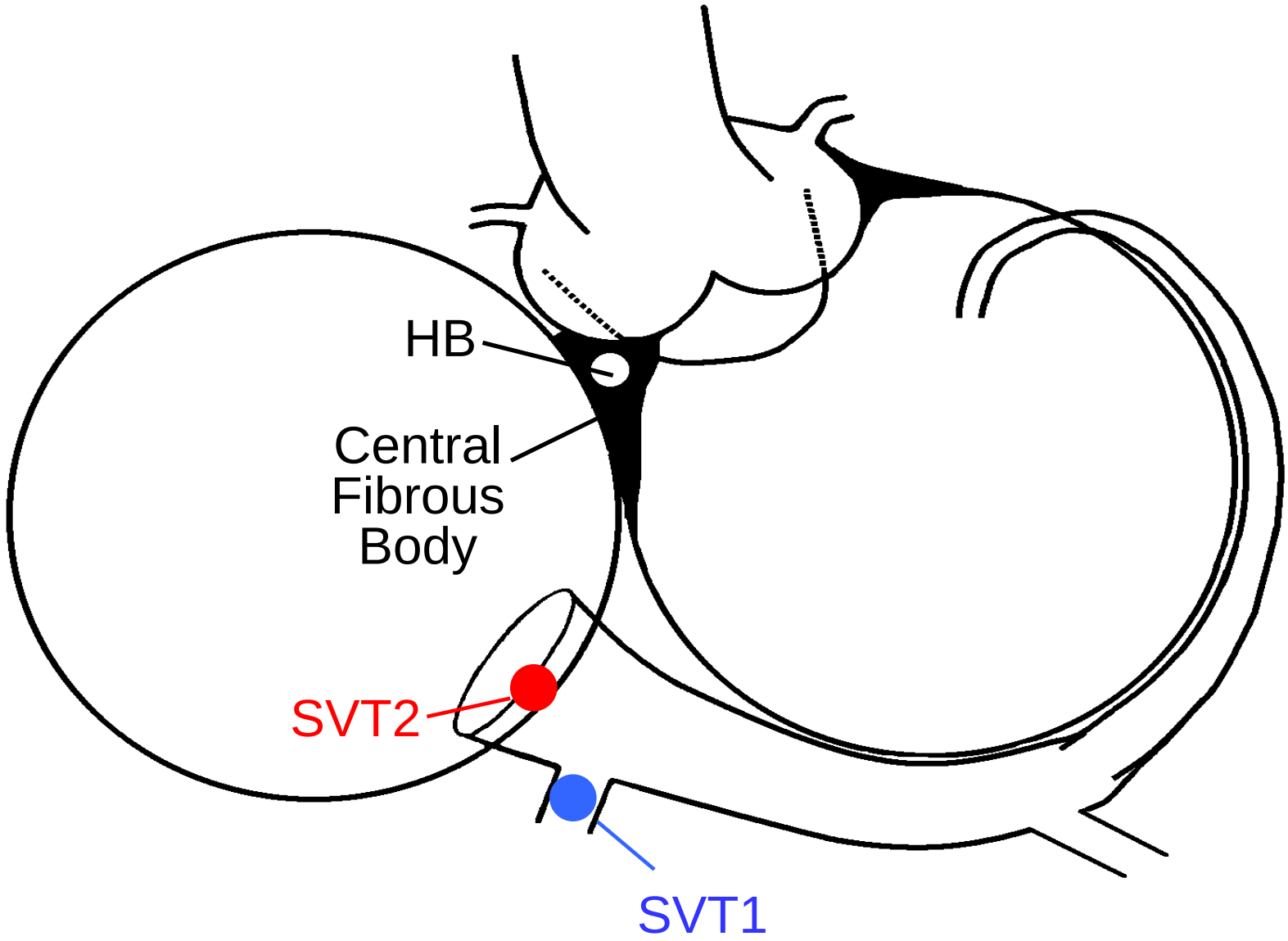


Figure 6.13F

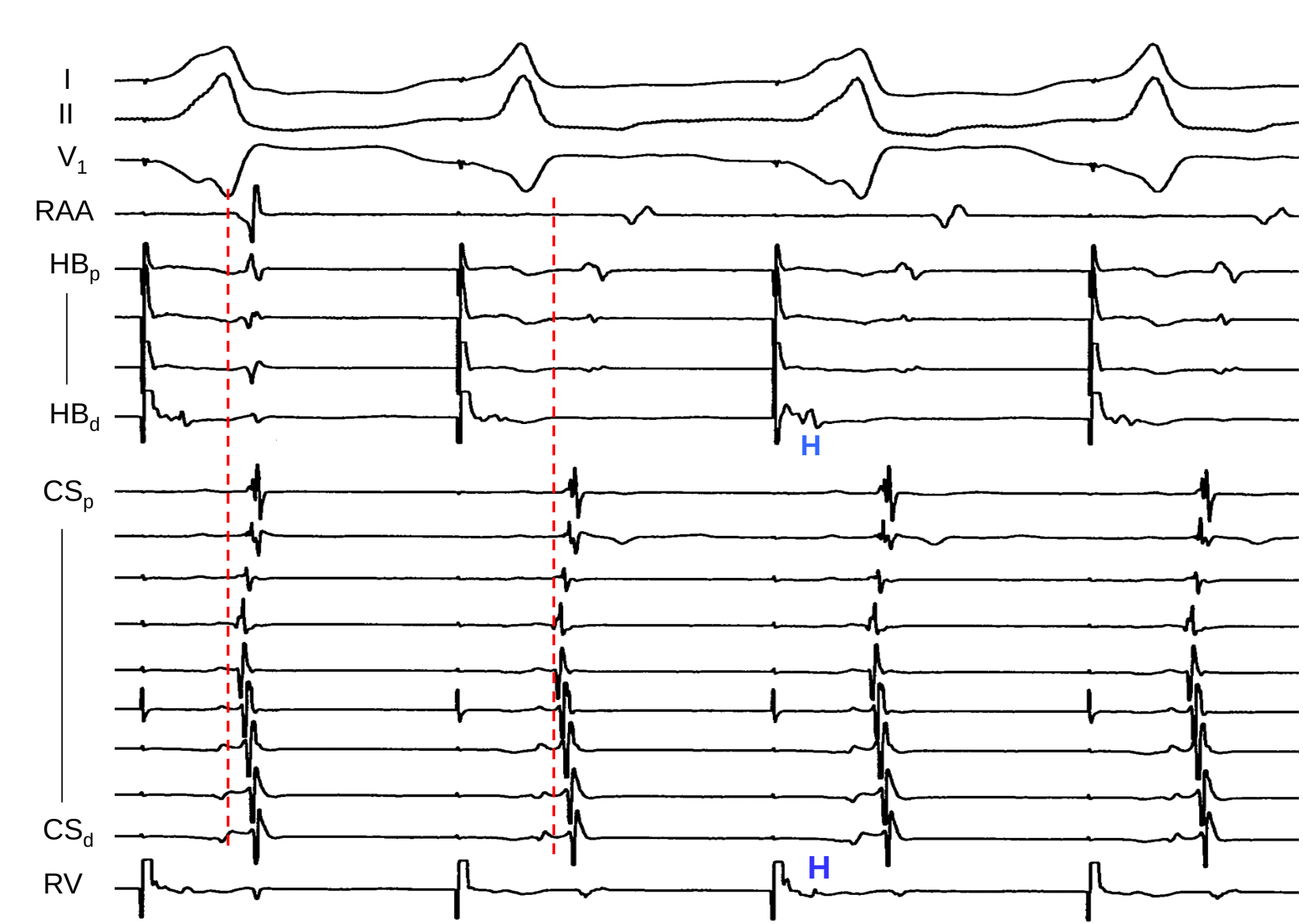


Figure 6.14A

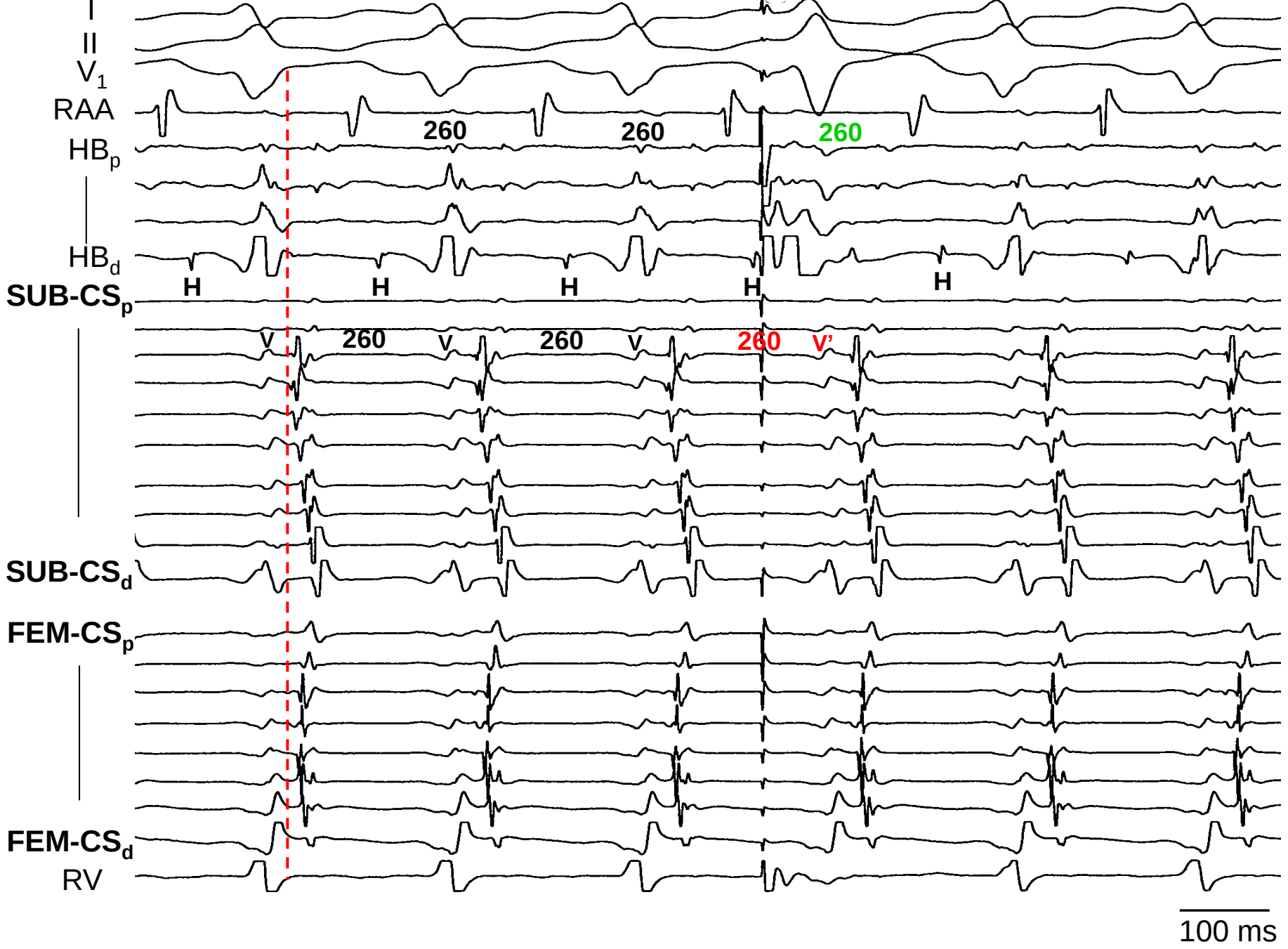

I
II
V1
RAA
HBp
HBd
SUB-CSp
SUB-CSd
FEM-CSp
FEM-CSd
RV
260
260
260
H
H
H
H
H
V
260
V
260
V
260
V'
100 ms

Figure 6.14B

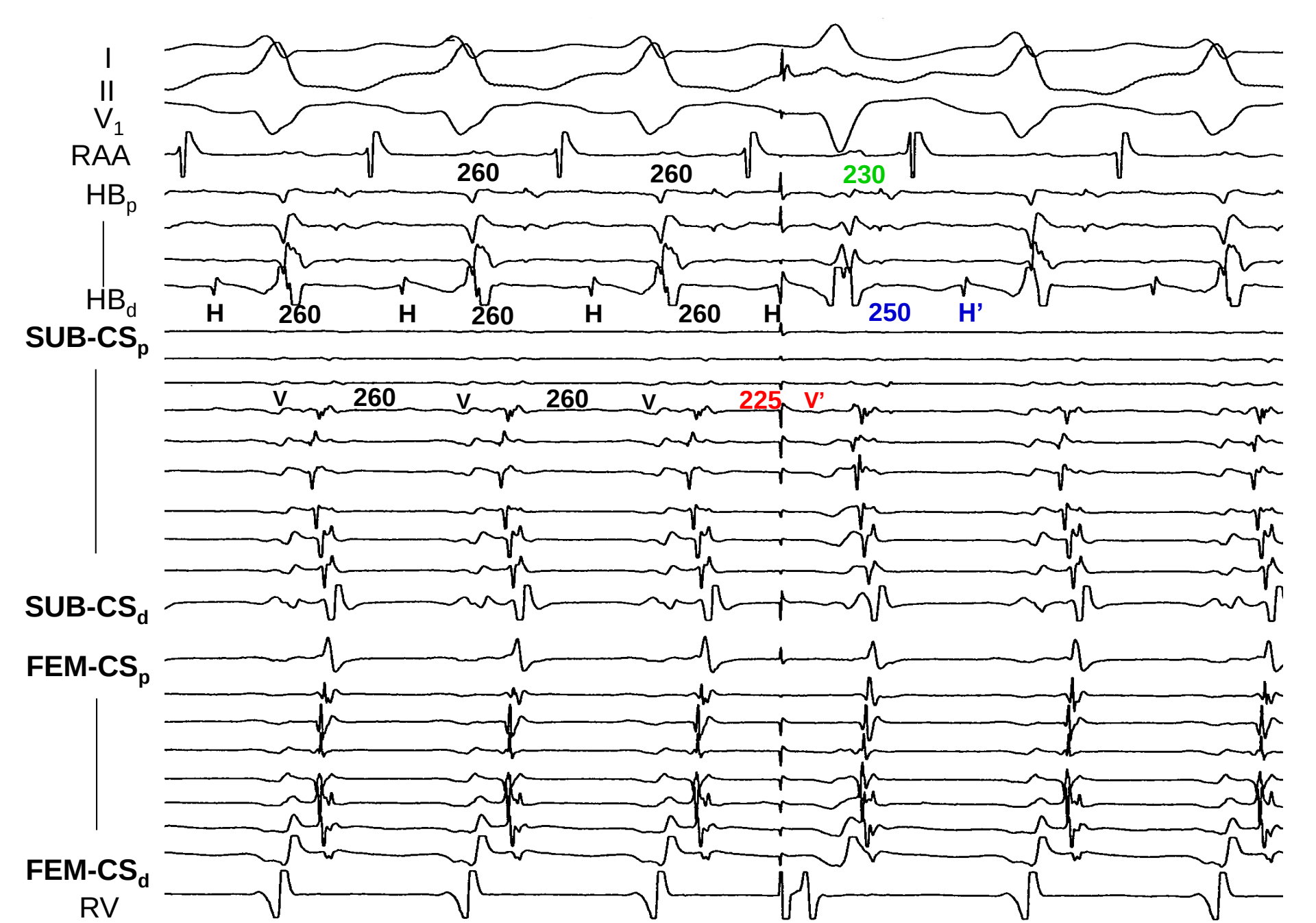

I
II
V1
RAA
HBp
HBd
SUB-CSp
SUB-CSd
FEM-CSp
FEM-CSd
RV
260
260
230
H
260
H
260
H
260
H
250
H'
V
260
V
260
V
225
V'
100 ms

Figure 6.14C

Epicardial PS-AP: Antegrade Conduction

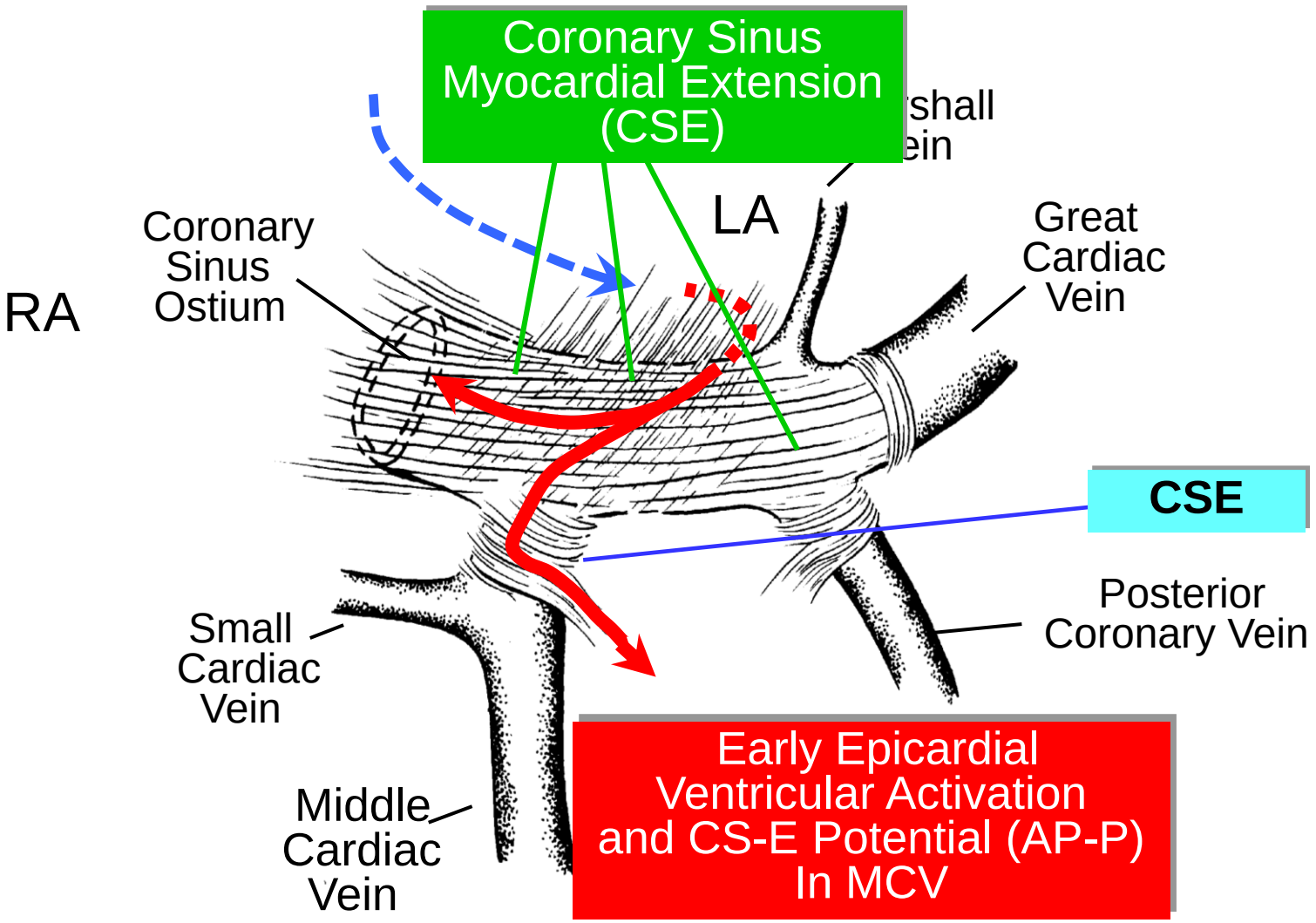


Figure 6.15A

LAO Projection

Epicardial PSAP: Retrograde Conduction

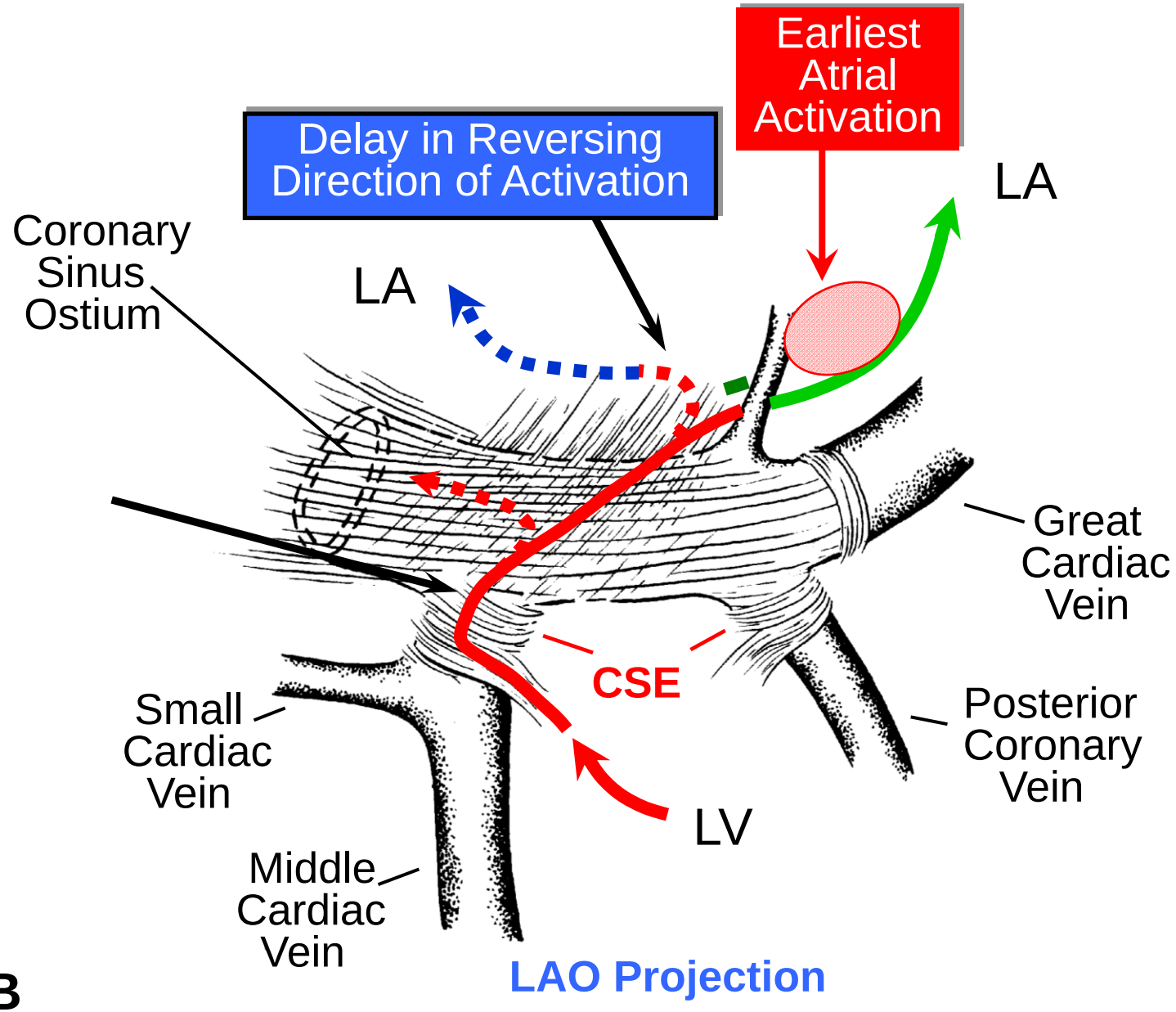


Figure 6.15B

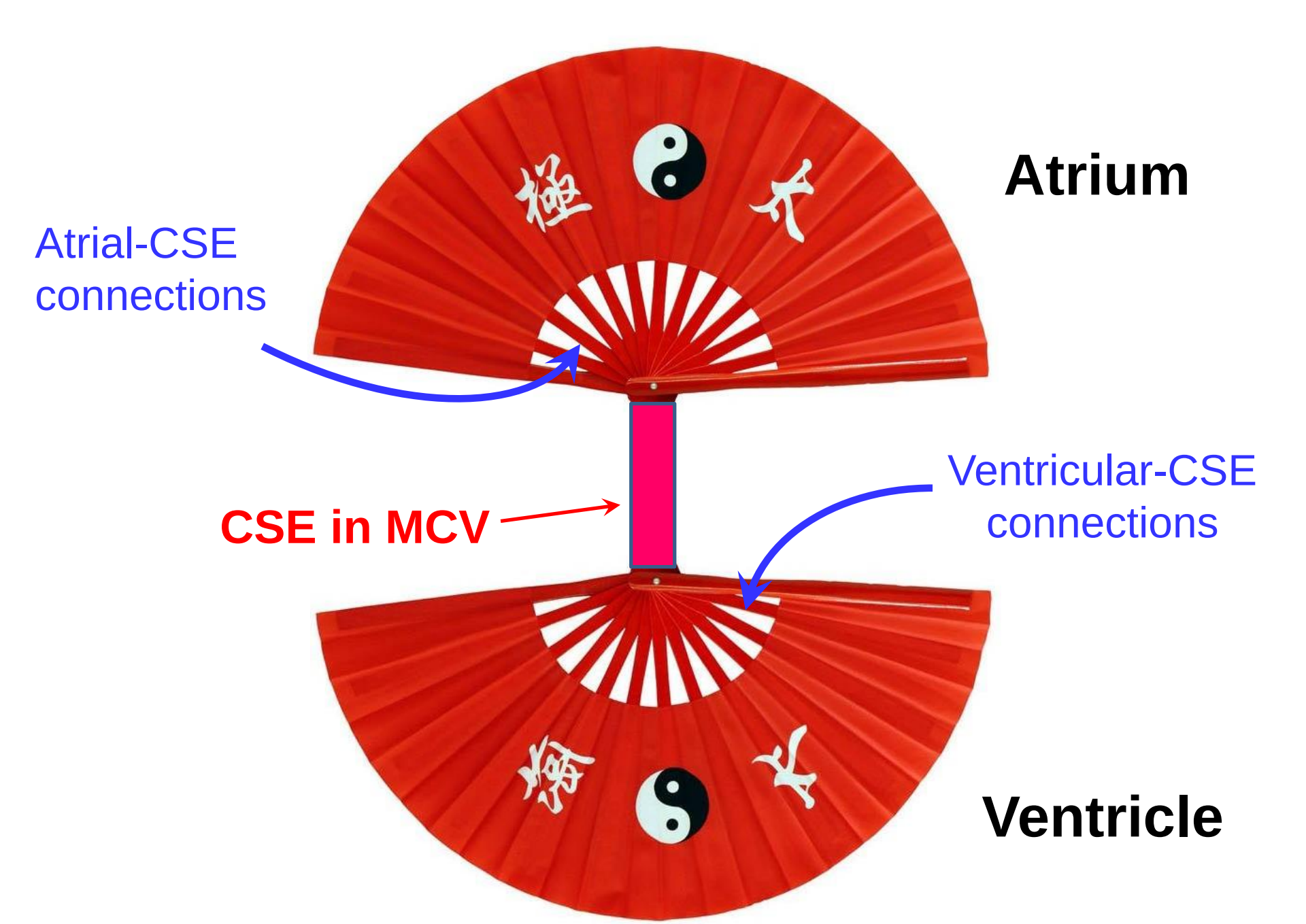

Atrium
Atrial-CSE connections
CSE in MCV
Ventricular-CSE connections
Ventricle

Figure 6.15C

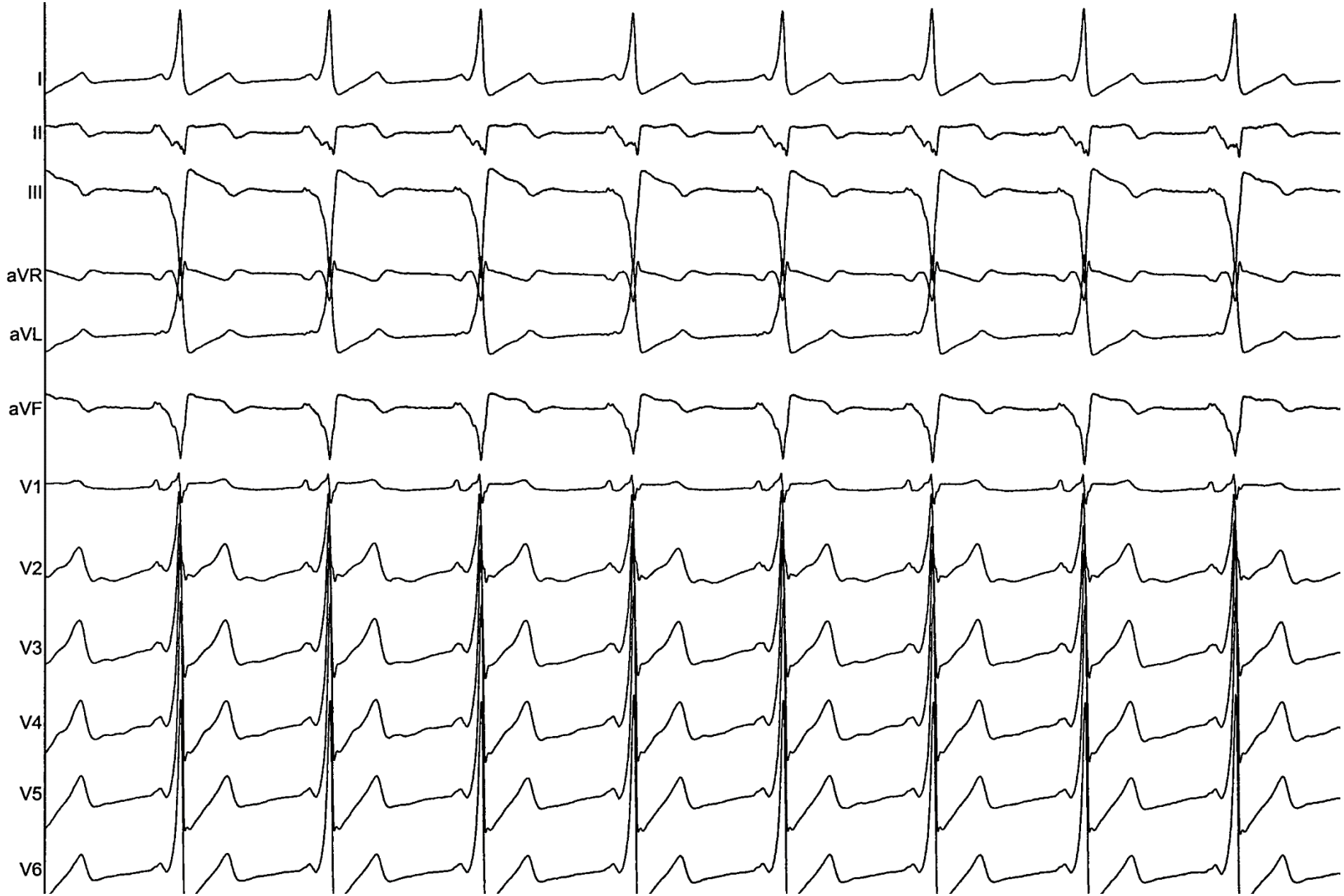


Figure 6.15D

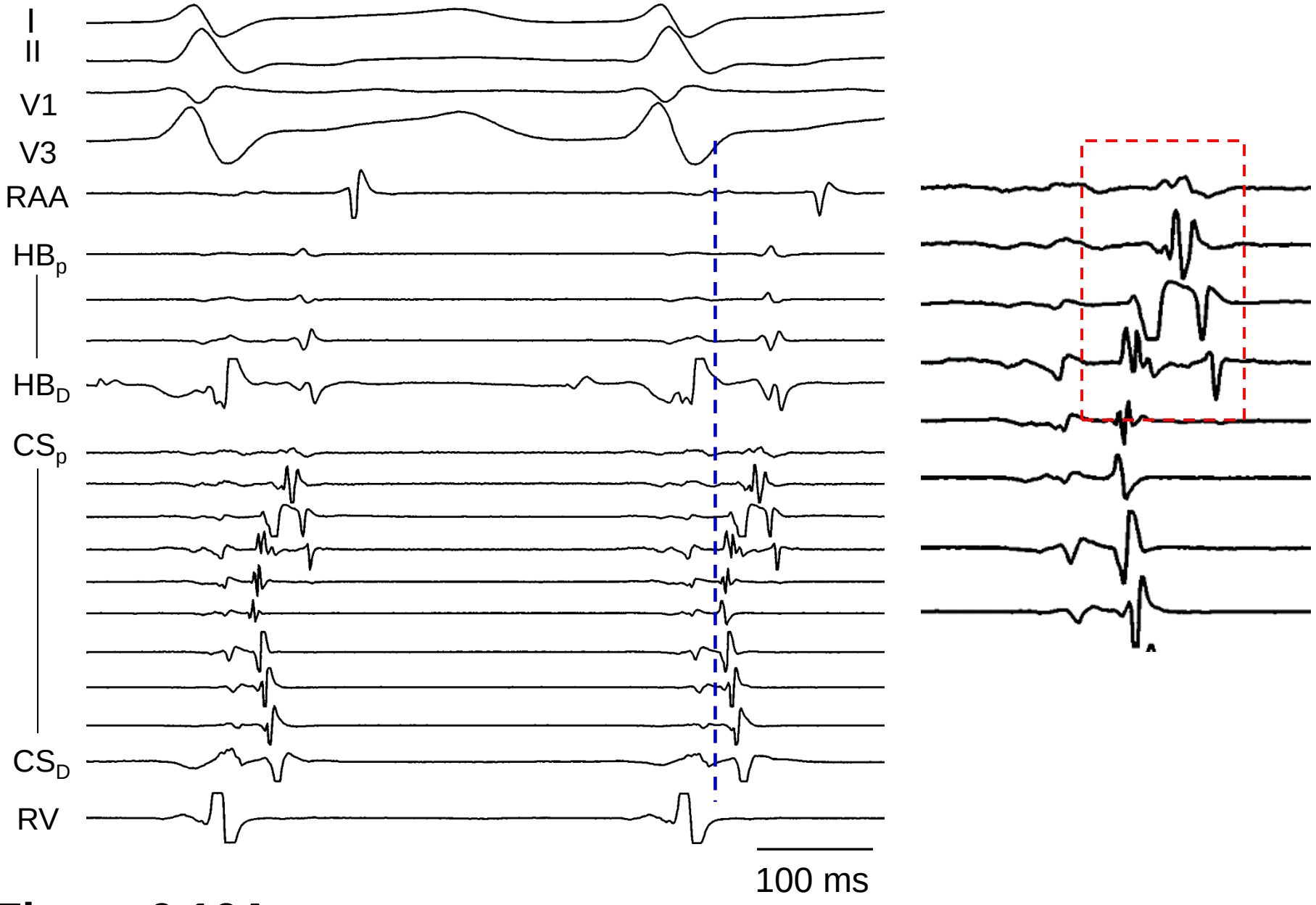


Figure 6.16A

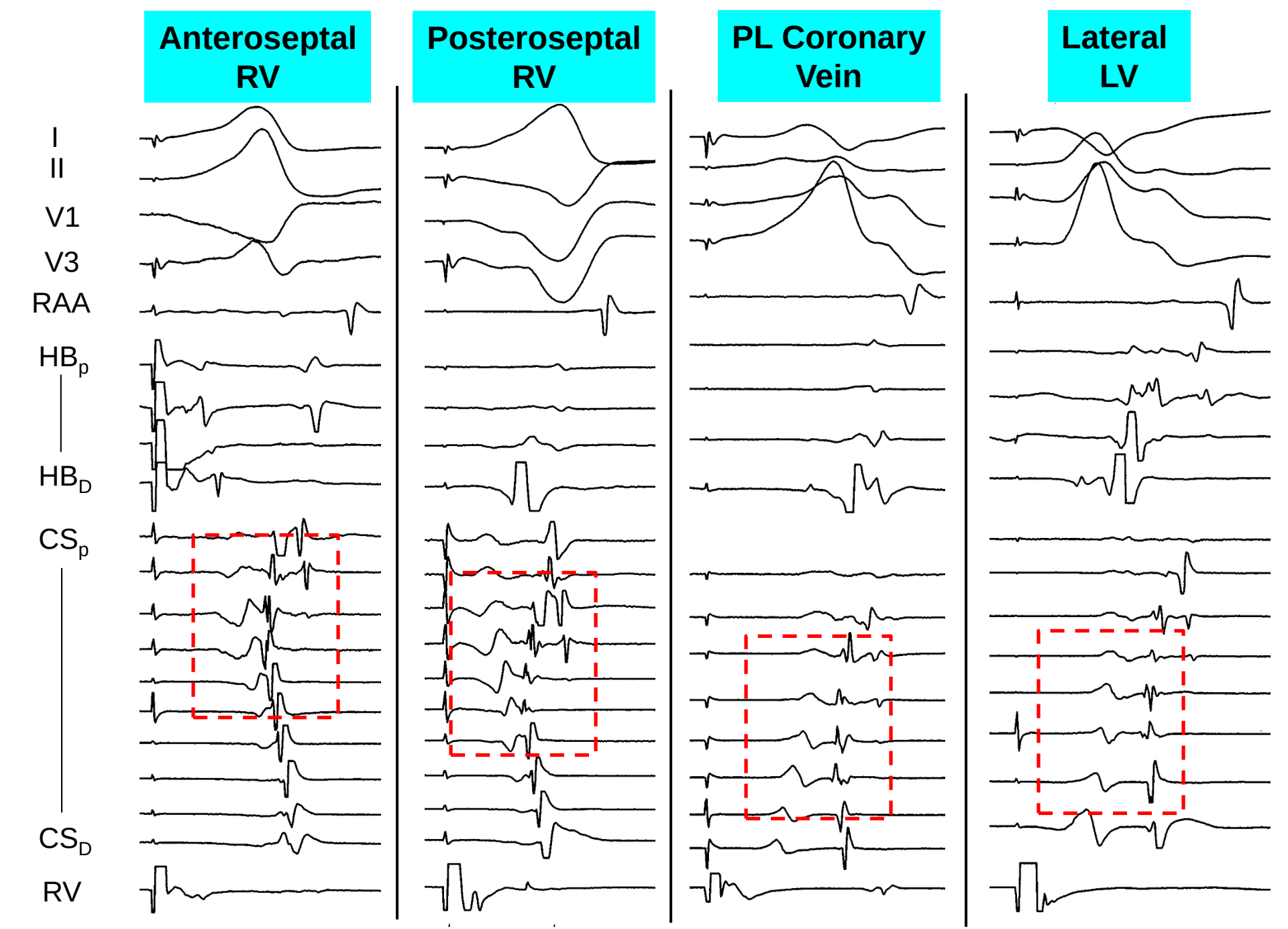
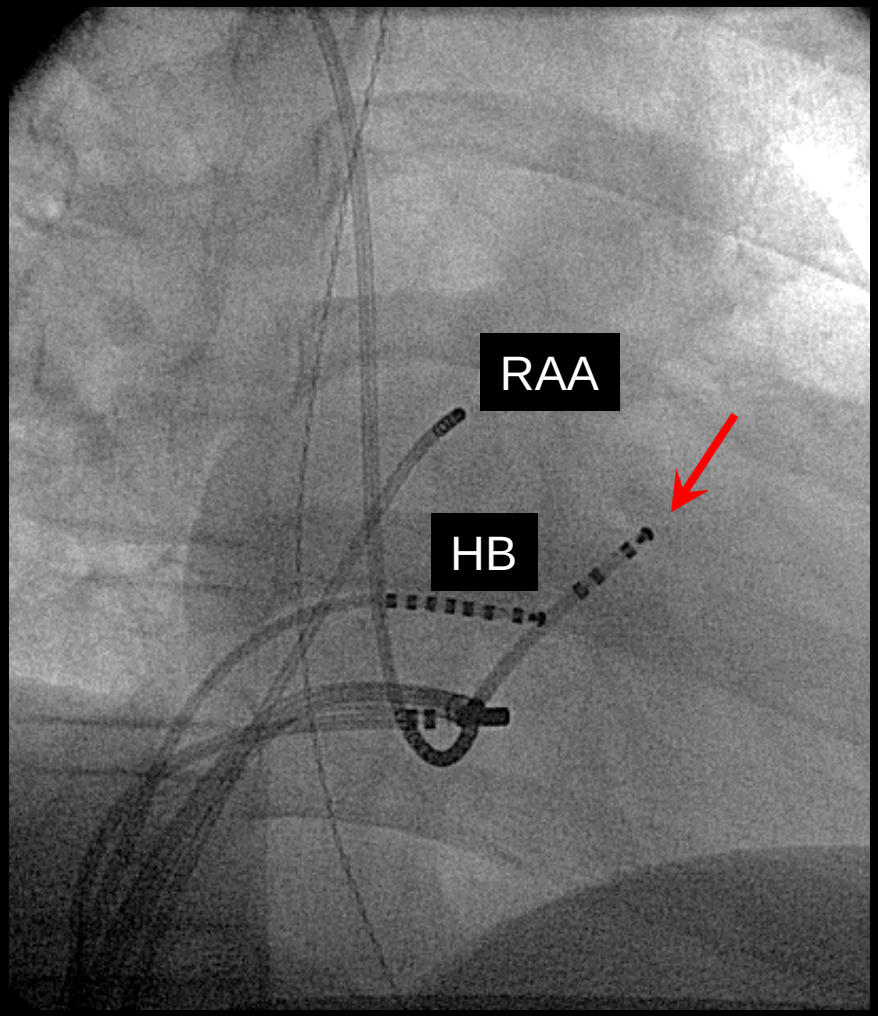
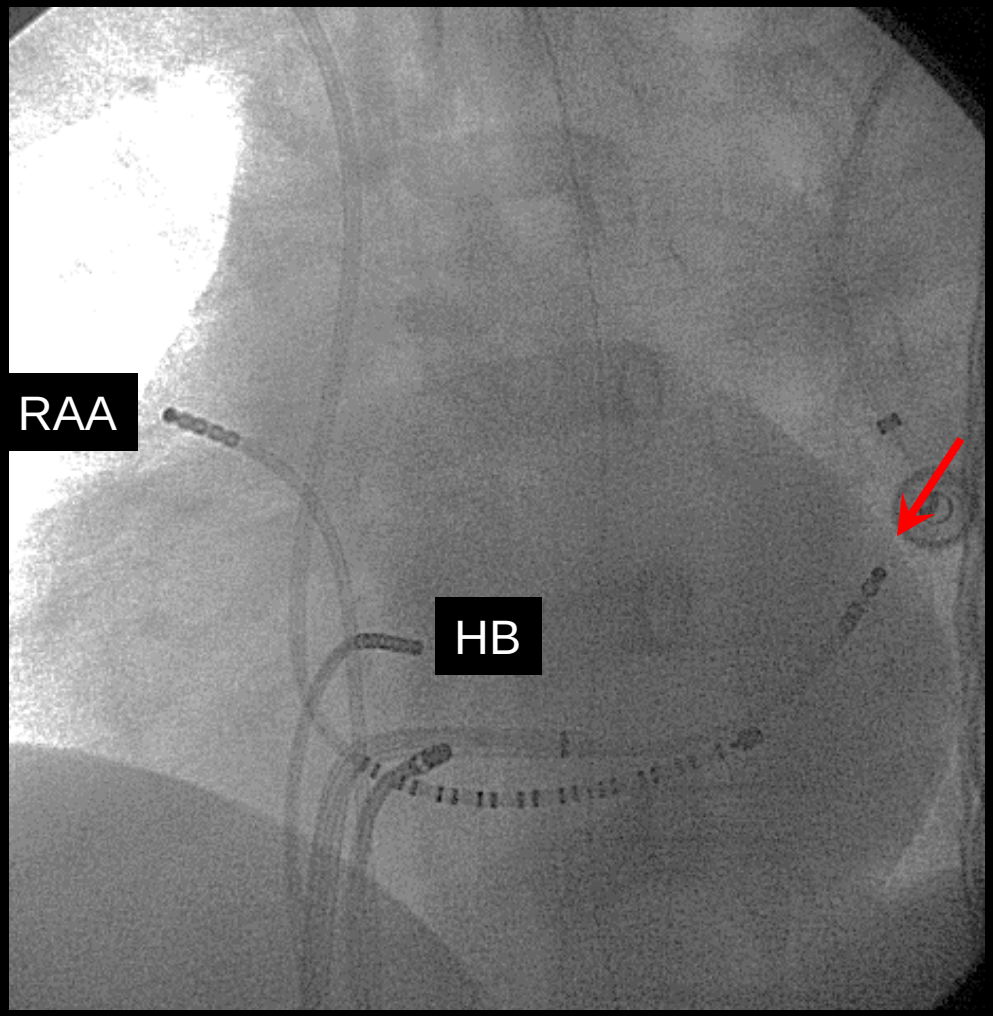

Anteroseptal RV
Posteroseptal RV
PL Coronary Vein
Lateral LV
I
II
V1
V3
RAA
HBp
HBD
CSp
CSD
RV

Figure 6.16B

Pace from Lateral Coronary Vein



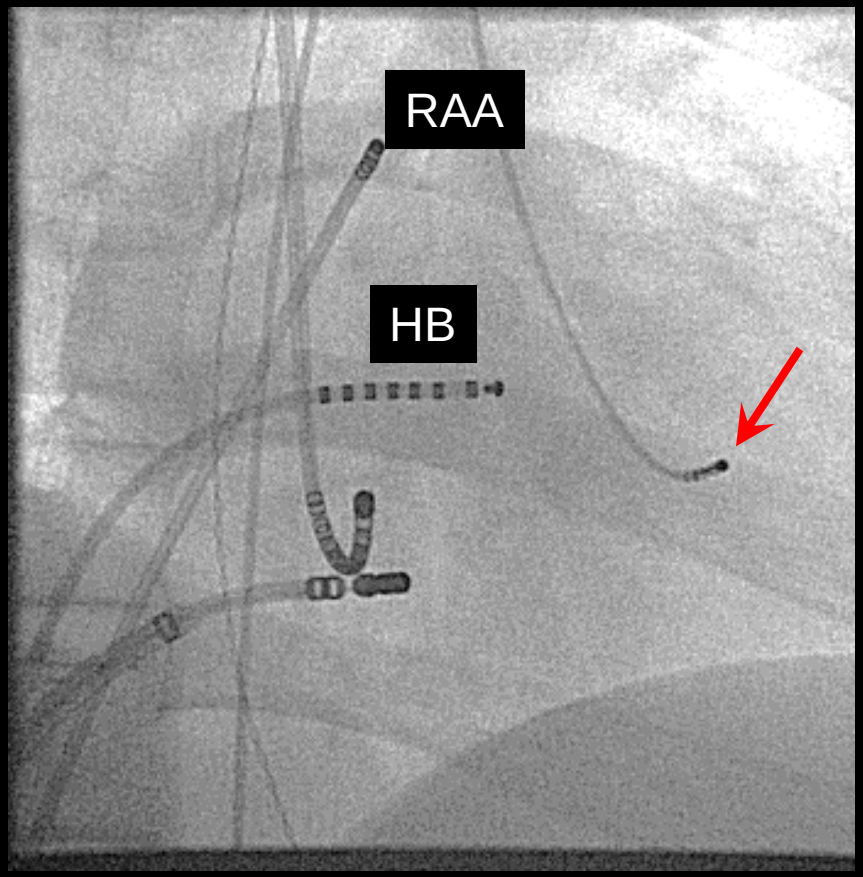
RAO



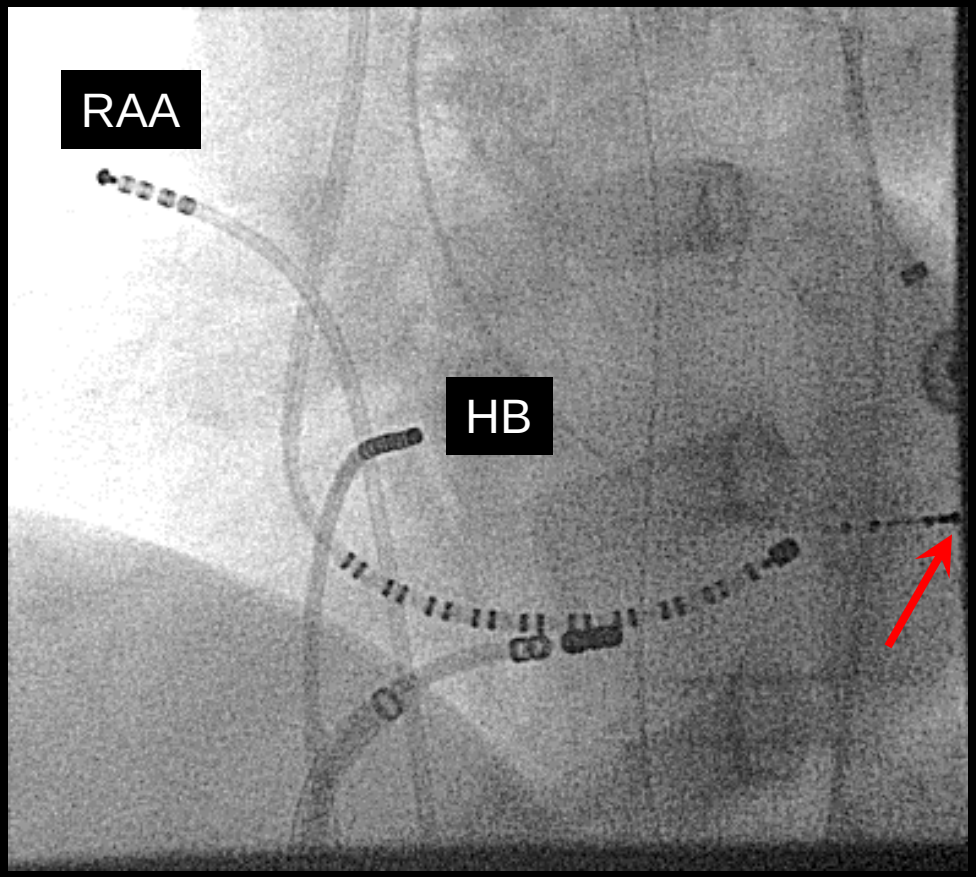
LAO

Figure 6.16C

Pace from Lateral Left Ventricle



RAO



LAO

Figure 6.16D

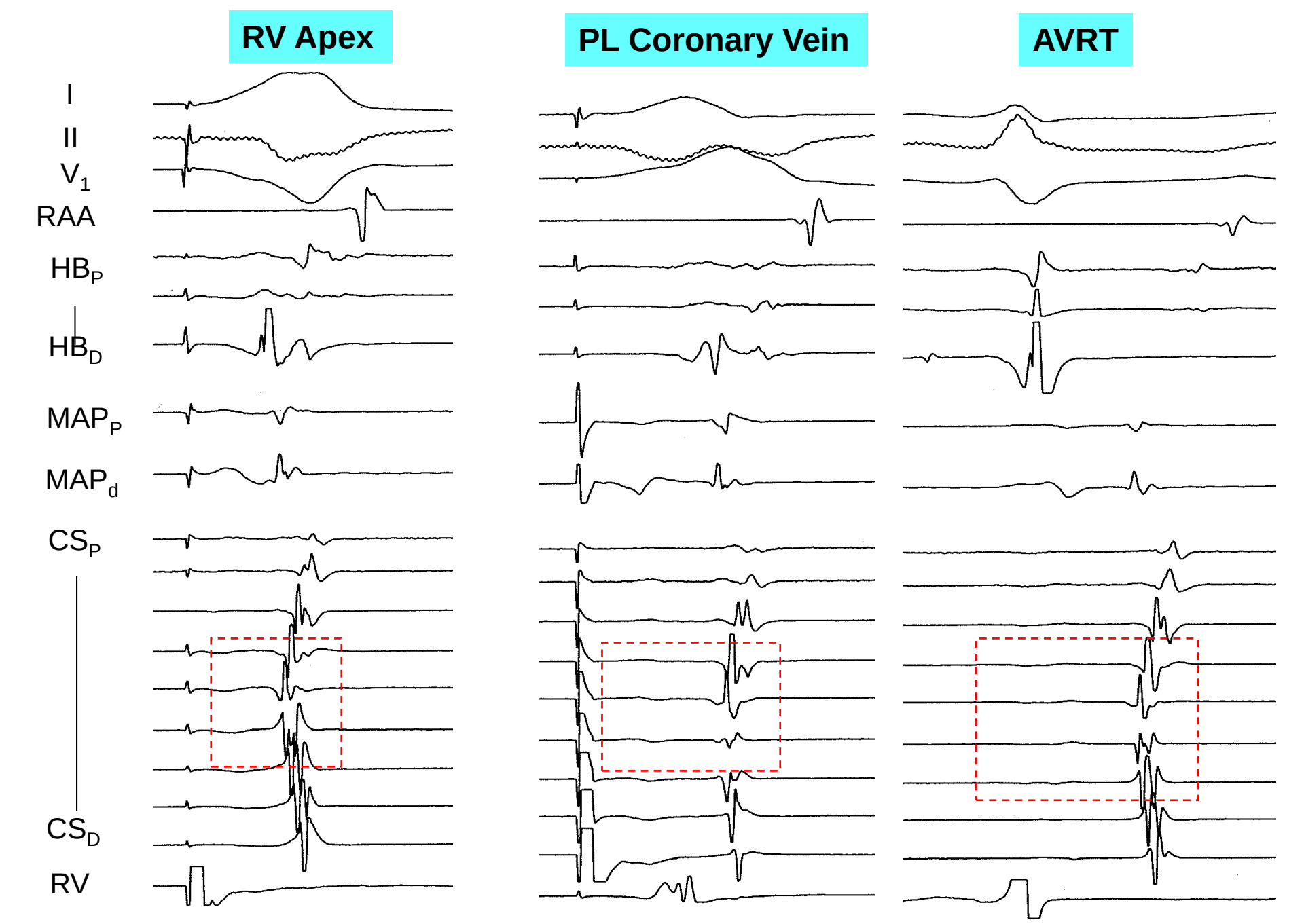
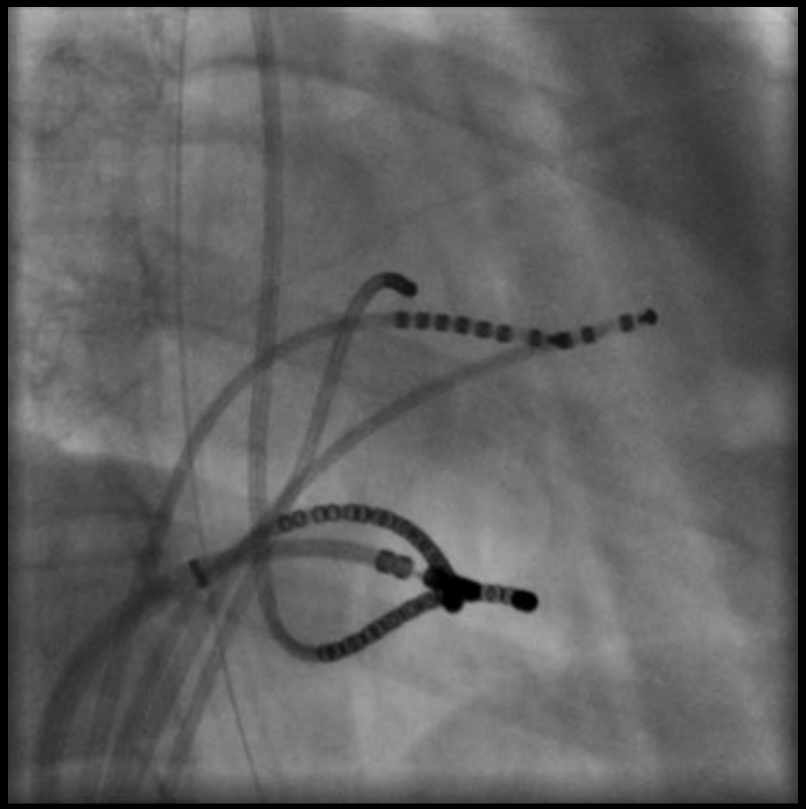

RV Apex
PL Coronary Vein
AVRT
I
II
V1
RAA
HBP
HBD
MAPP
MAPd
CSP
CSD
RV
100 ms

Figure 6.17A

PS-AP or Slow/slow or Fast/slow AVNRT:
CS catheter comes from subclavian or internal jugular vein



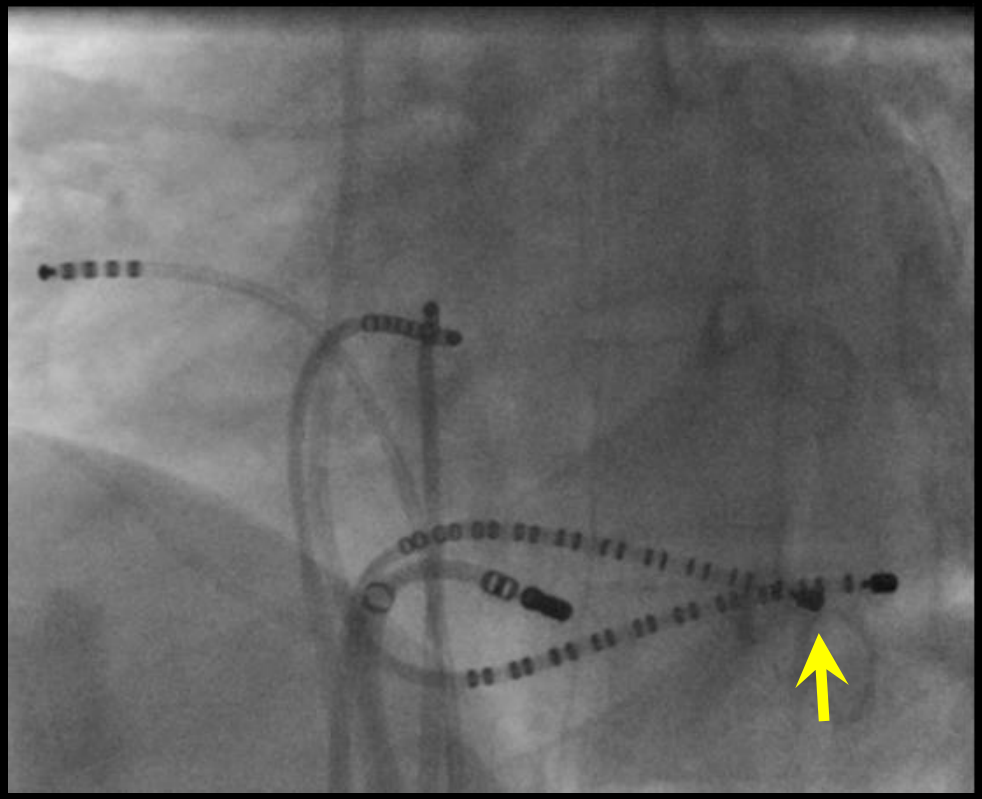
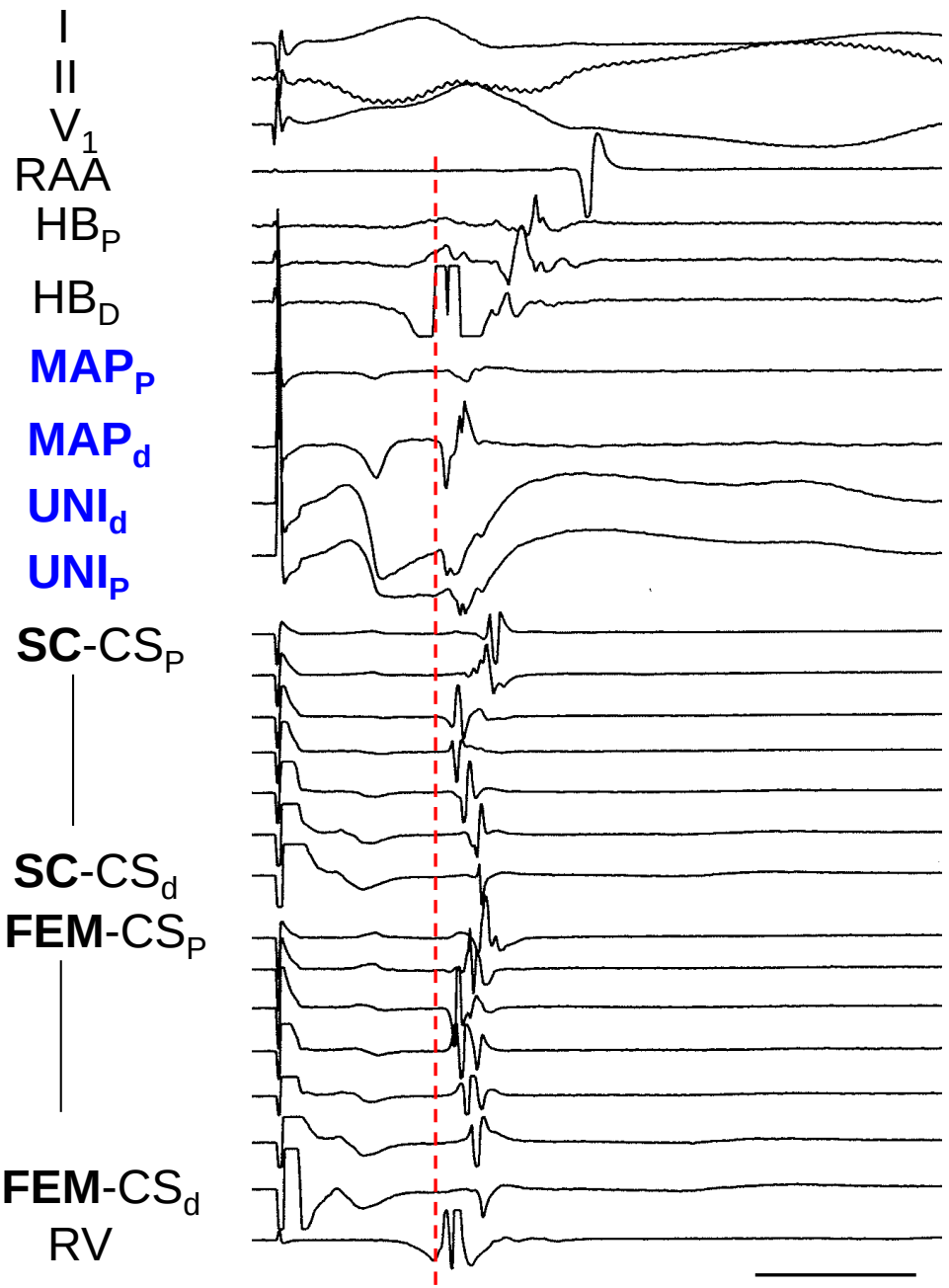


Figure 6.17B


I
II
V1
RAA
HBP
HBD
MAPP
MAPd
UNId
UNIP
SC-CSP
SC-CSd
FEM-CSP
FEM-CSd
RV
100 ms

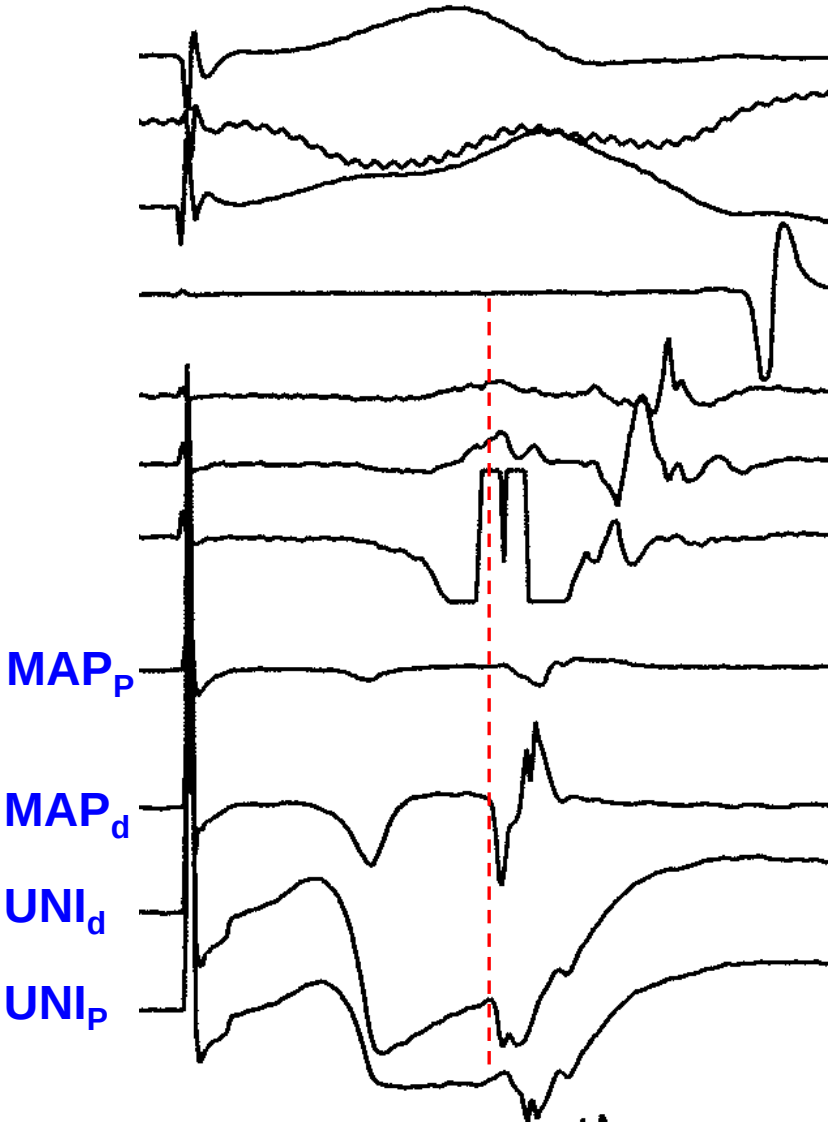

MAPP
MAPd
UNId
UNIP

Figure 6.17C

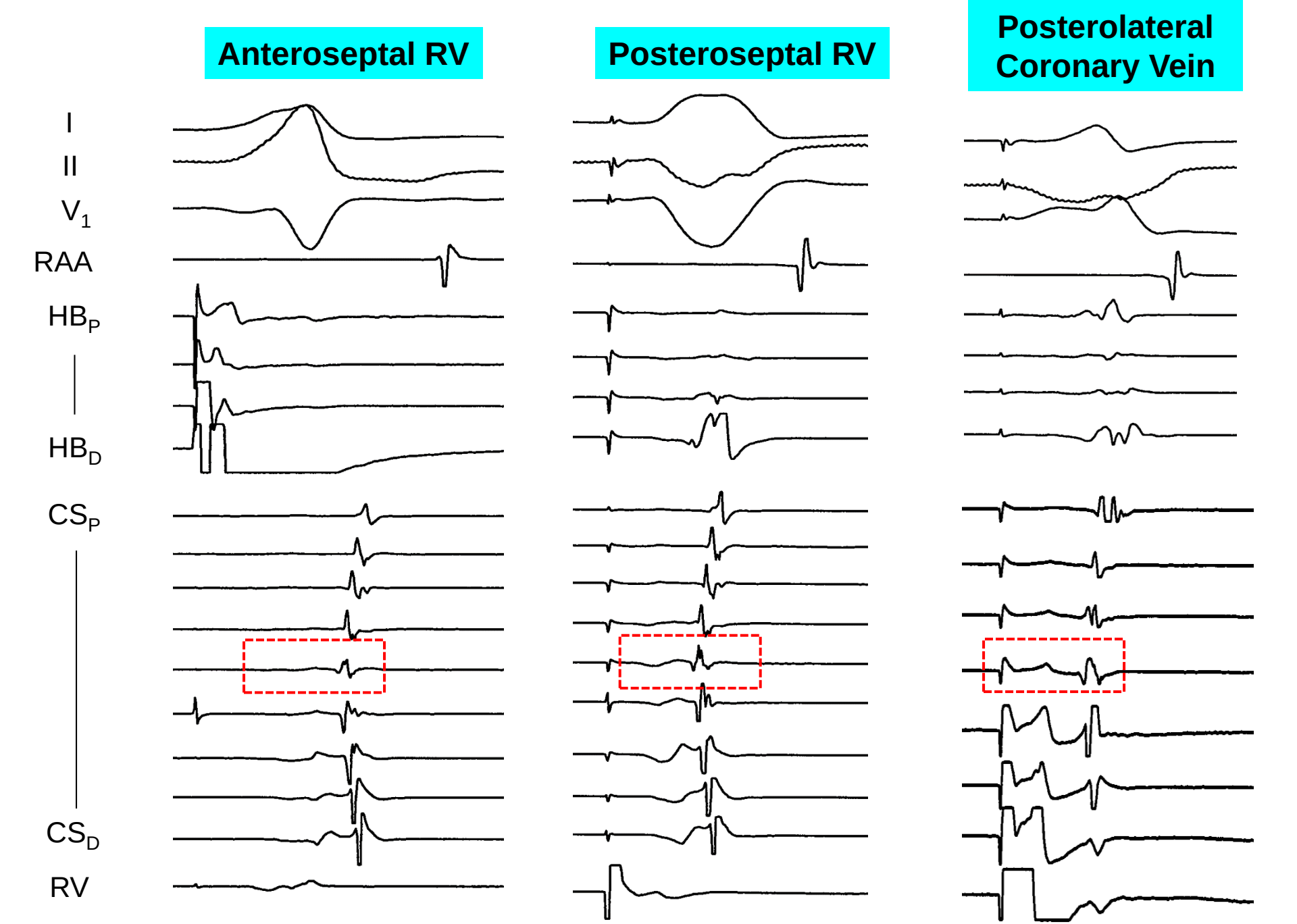
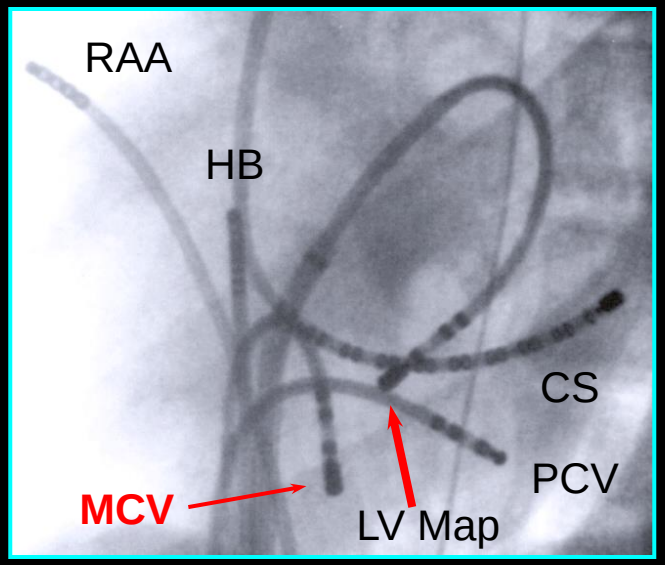

Anteroseptal RV
Posteroseptal RV
Posterolateral Coronary Vein
I
II
V1
RAA
HBP
HBD
CSP
CSD
RV

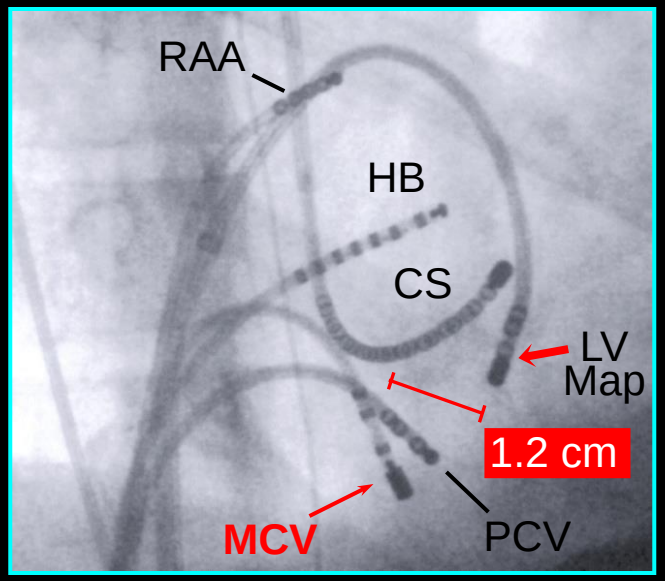
Figure 6.17D

LV Endocardial Mapping - Antegrade AP Conduction

LAO



RAO



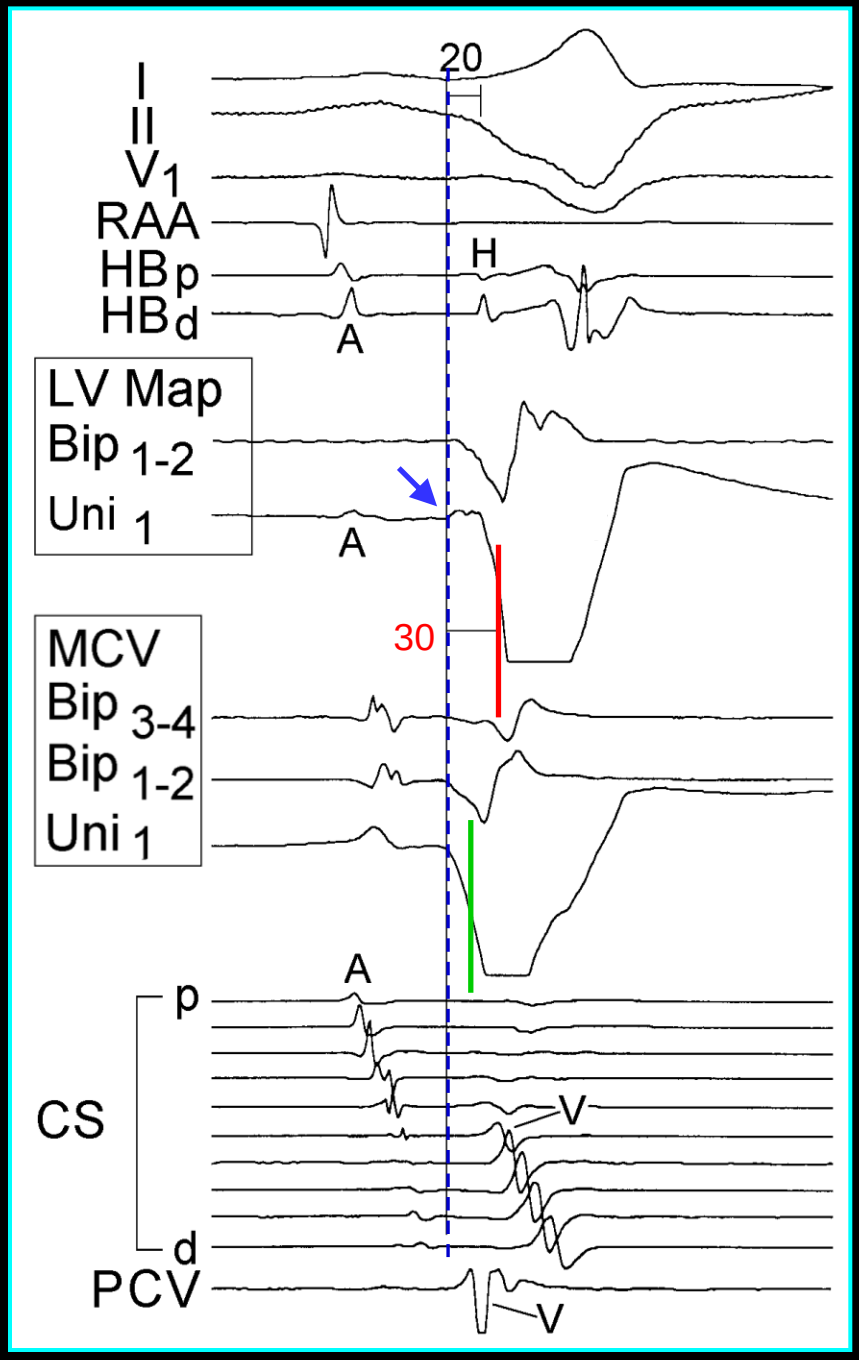
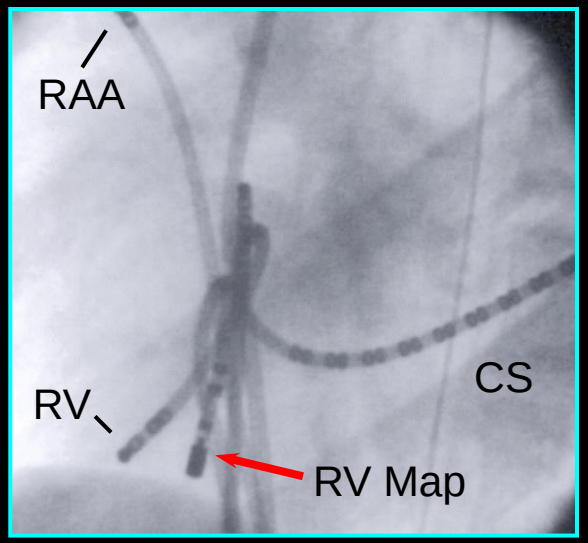


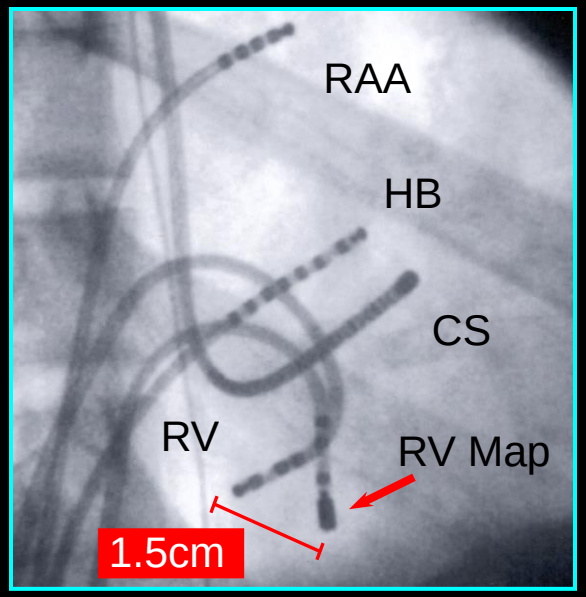
Figure 6.18A

RV Endocardial Mapping - Antegrade AP Conduction

LAO



RAO



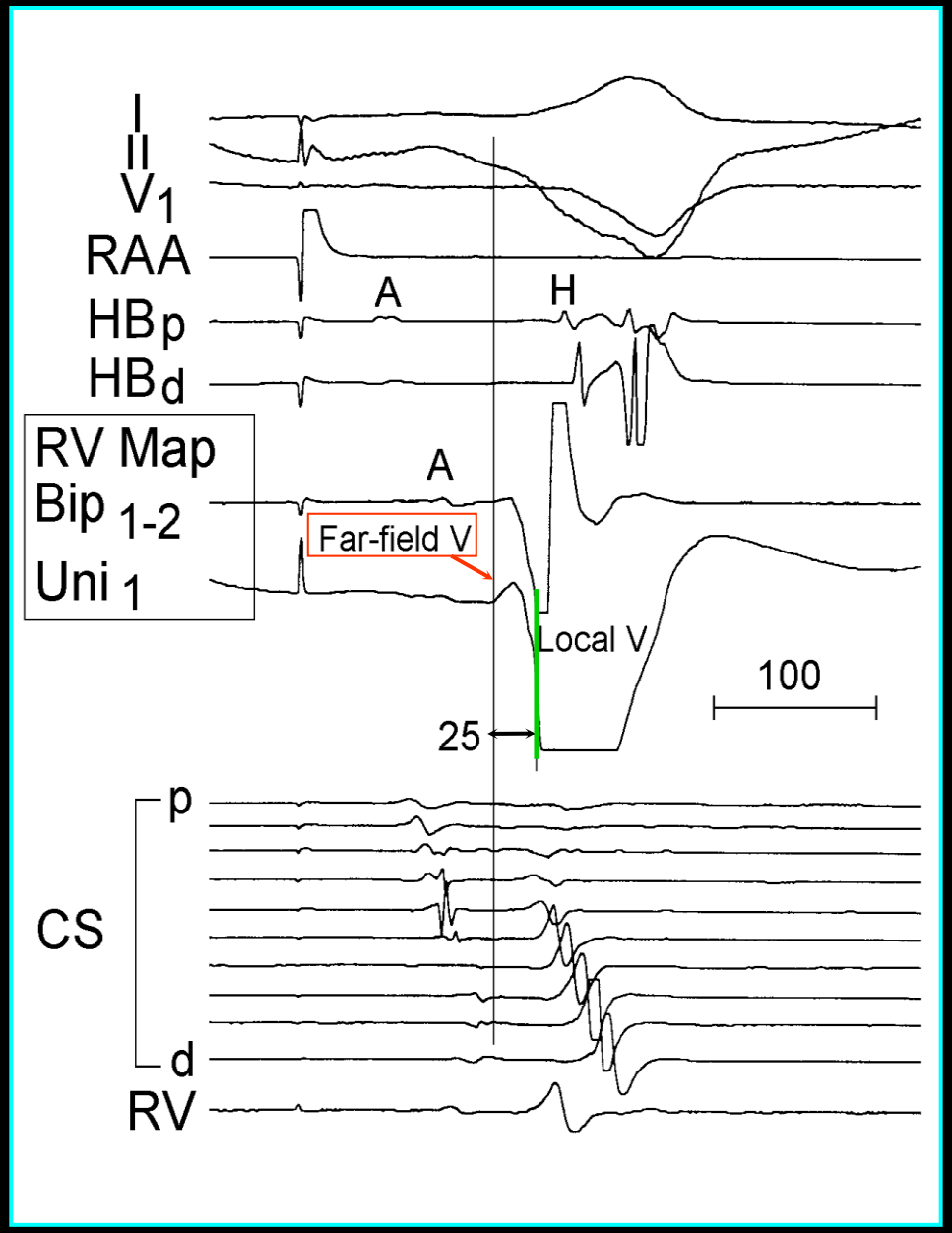
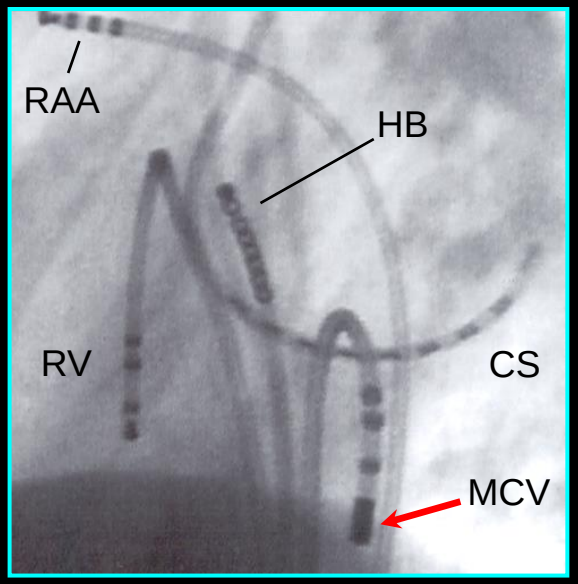


Figure 6.18B

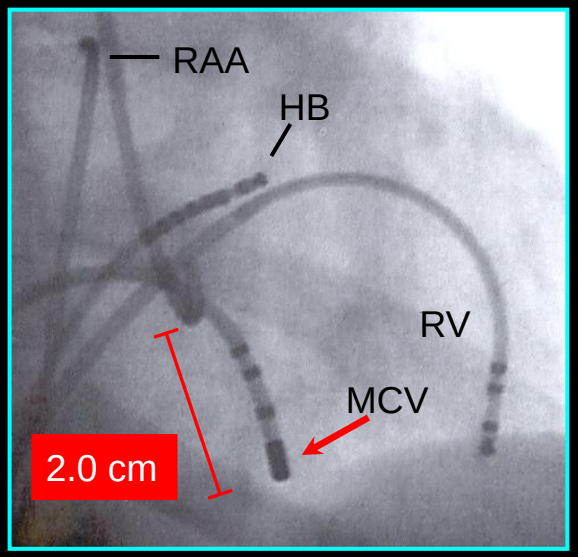
Courtesy of Dr. Jackman

CS Extension – AP Potential (CSE-AP) Deep in Middle Cardiac Vein

LAO



RAO



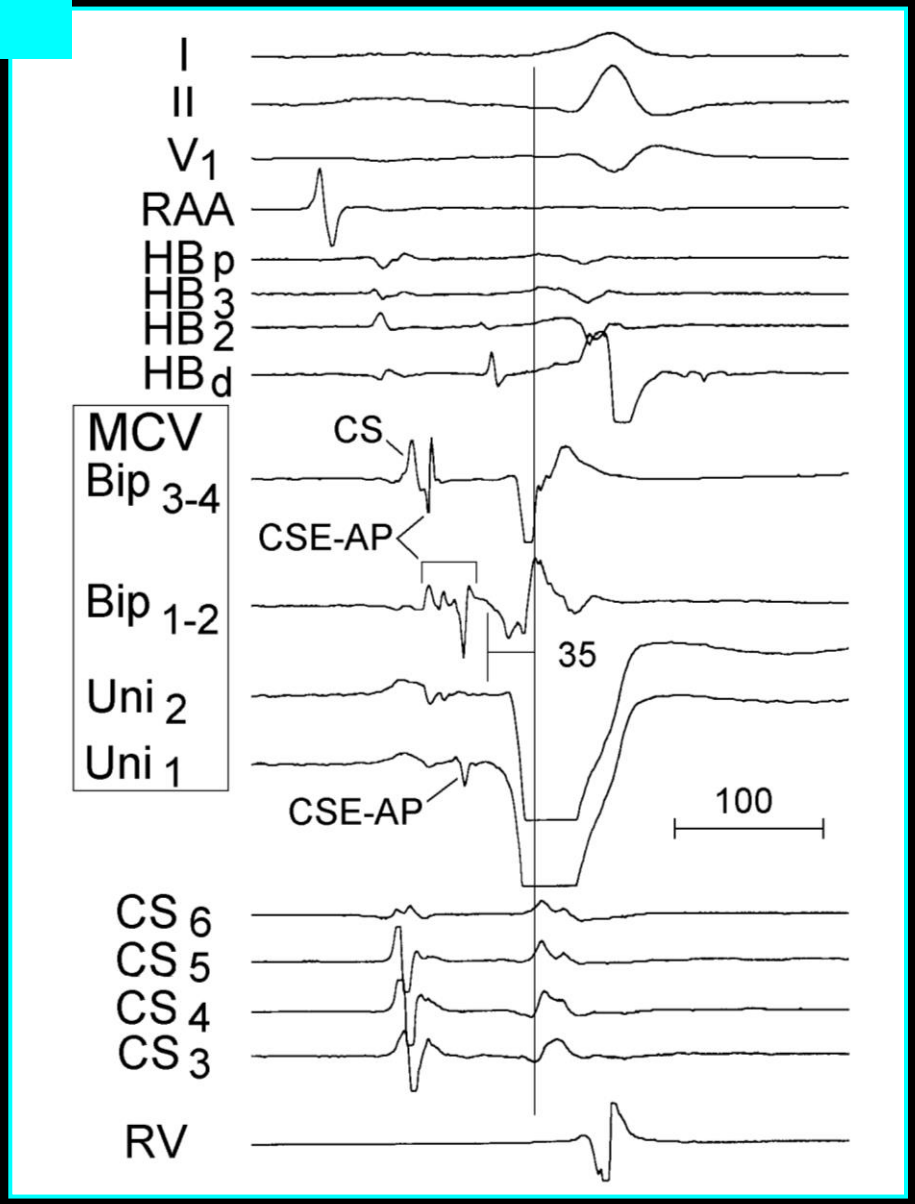


Figure 6.18C

Courtesy of Dr. Jackman

Validation of Antegrade CSE-AP Potential

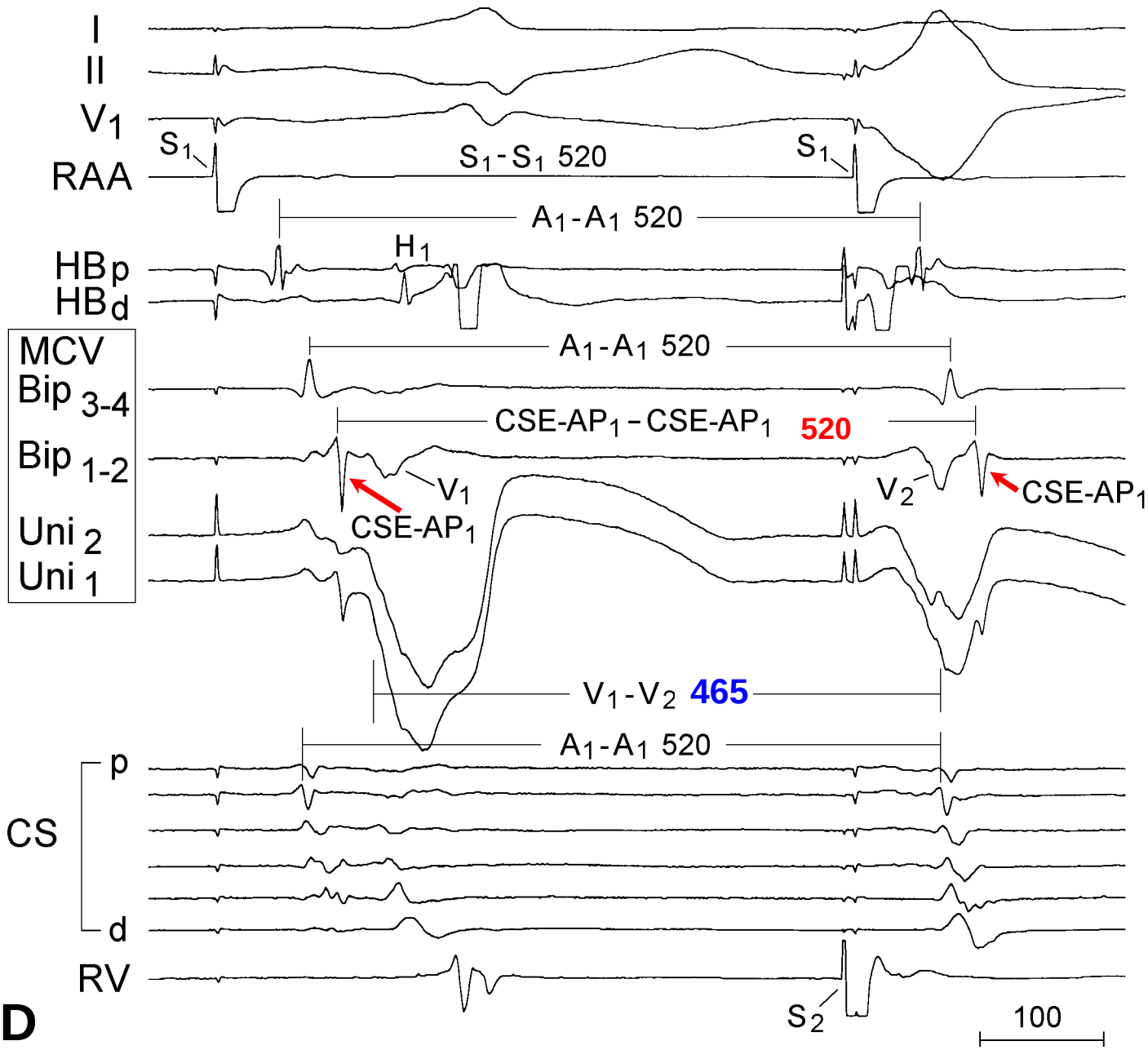


Figure 6.18D

Validation of Antegrade CSE-AP Potential

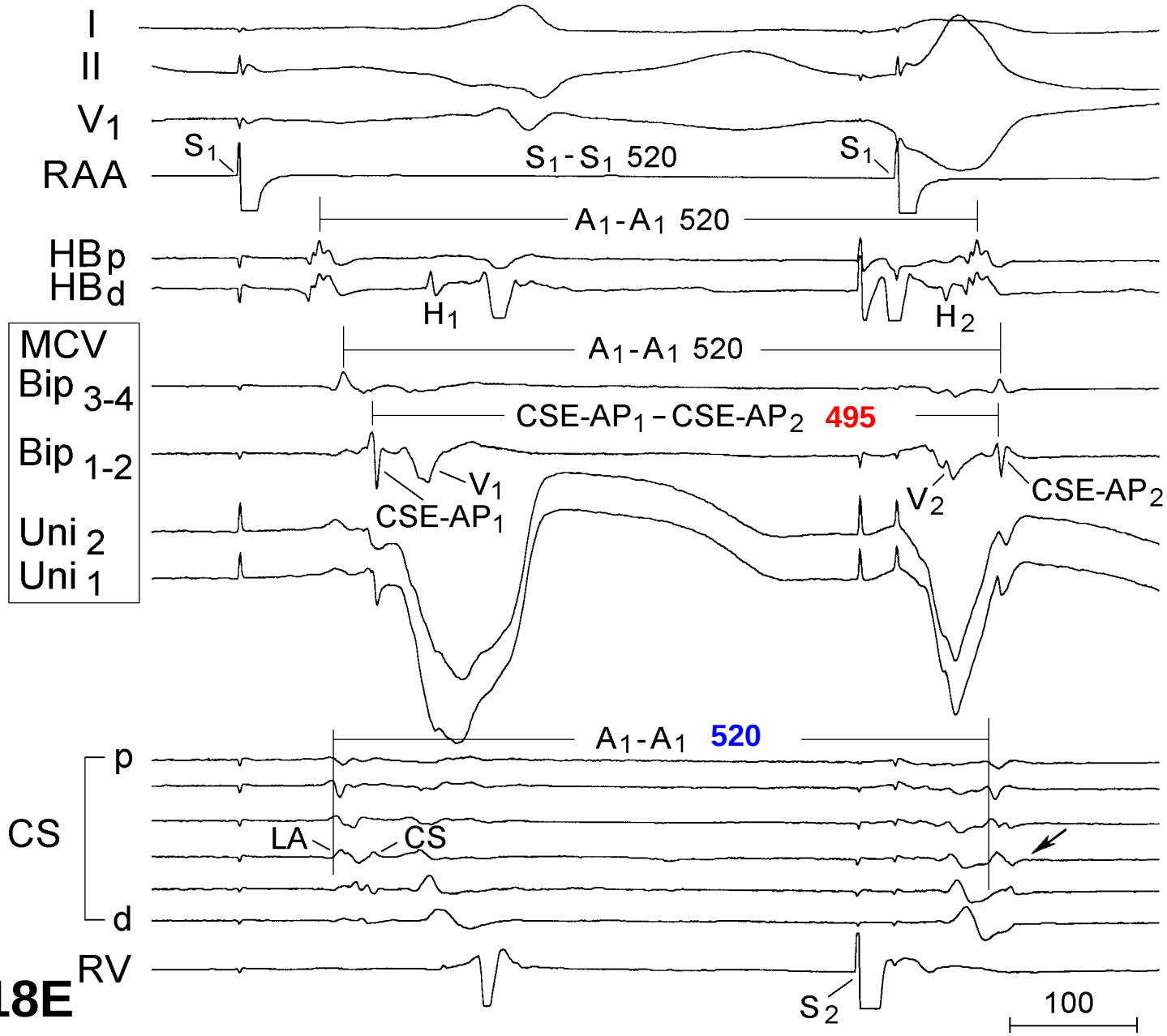


Figure 6.18E

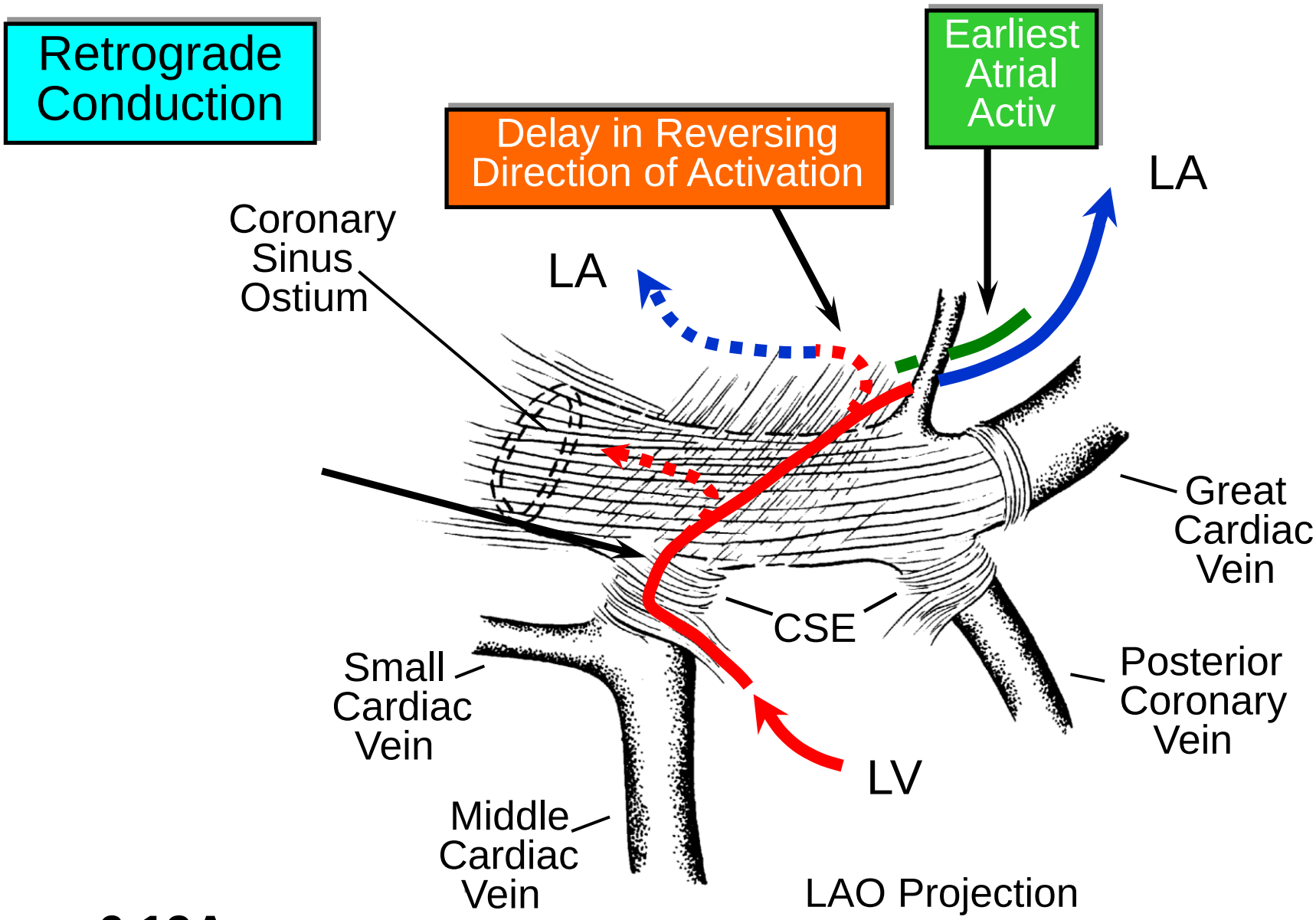

Retrograde Conduction
Delay in Reversing Direction of Activation
Earliest Atrial Activ
LA
LA
Coronary Sinus Ostium
Great Cardiac Vein
CSE
Small Cardiac Vein
Posterior Coronary Vein
LV
Middle Cardiac Vein
LAO Projection

Figure 6.19A

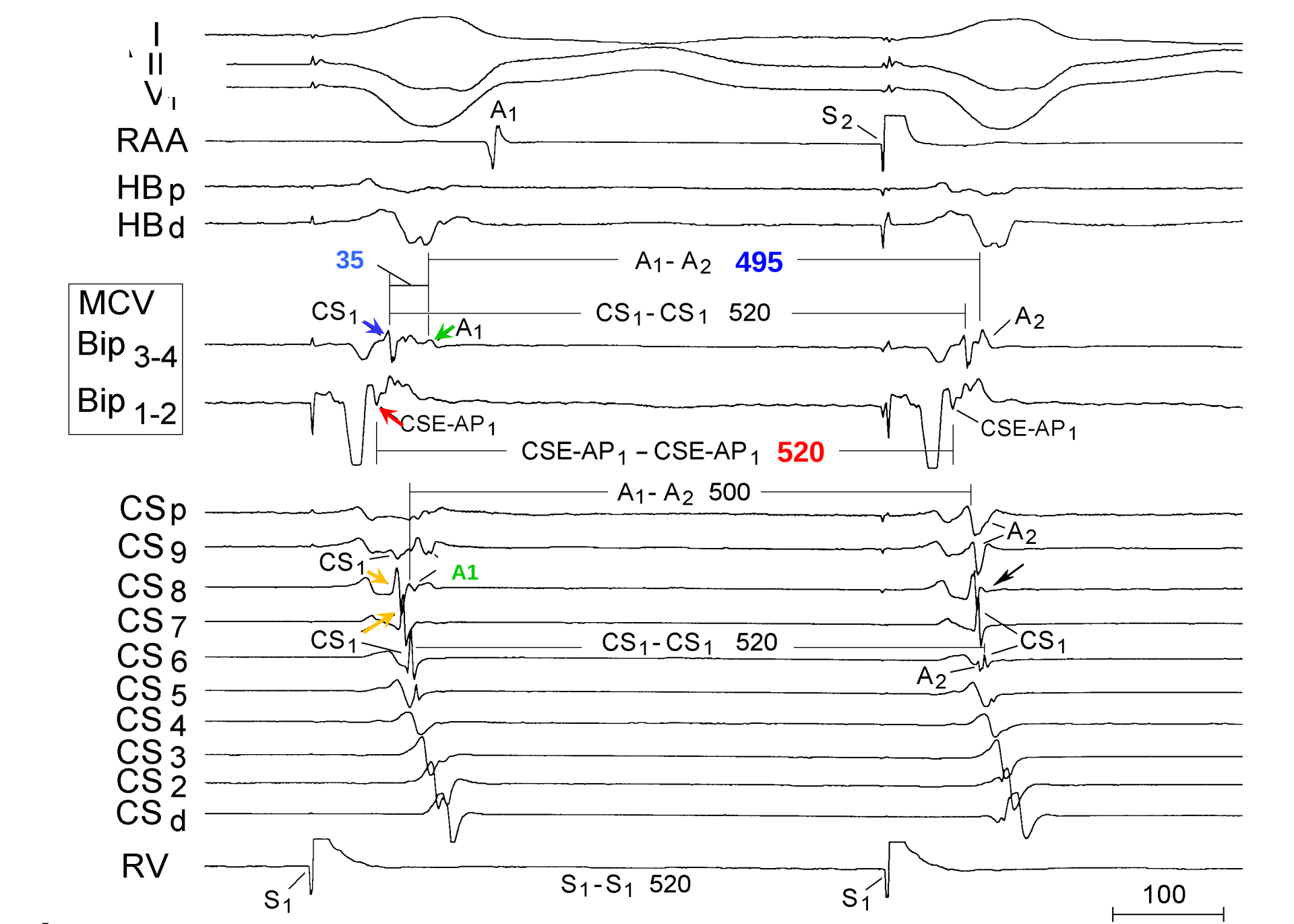

I
II
V1
RAA
HBp
HBd
A1
S2
35
A1 - A2 495
MCV
Bip 3-4
Bip 1-2
CS1
CS1 - CS1 520
A1
A2
CSE-AP1
CSE-AP1 – CSE-AP1 520
CSE-AP1
A1 - A2 500
CSp
CS9
CS8
CS7
CS6
CS5
CS4
CS3
CS2
CSd
A2
CS1
A1
CS1
CS1 - CS1 520
CS1
A2
RV
S1
S1 - S1 520
S1
100

Figure 6.19B

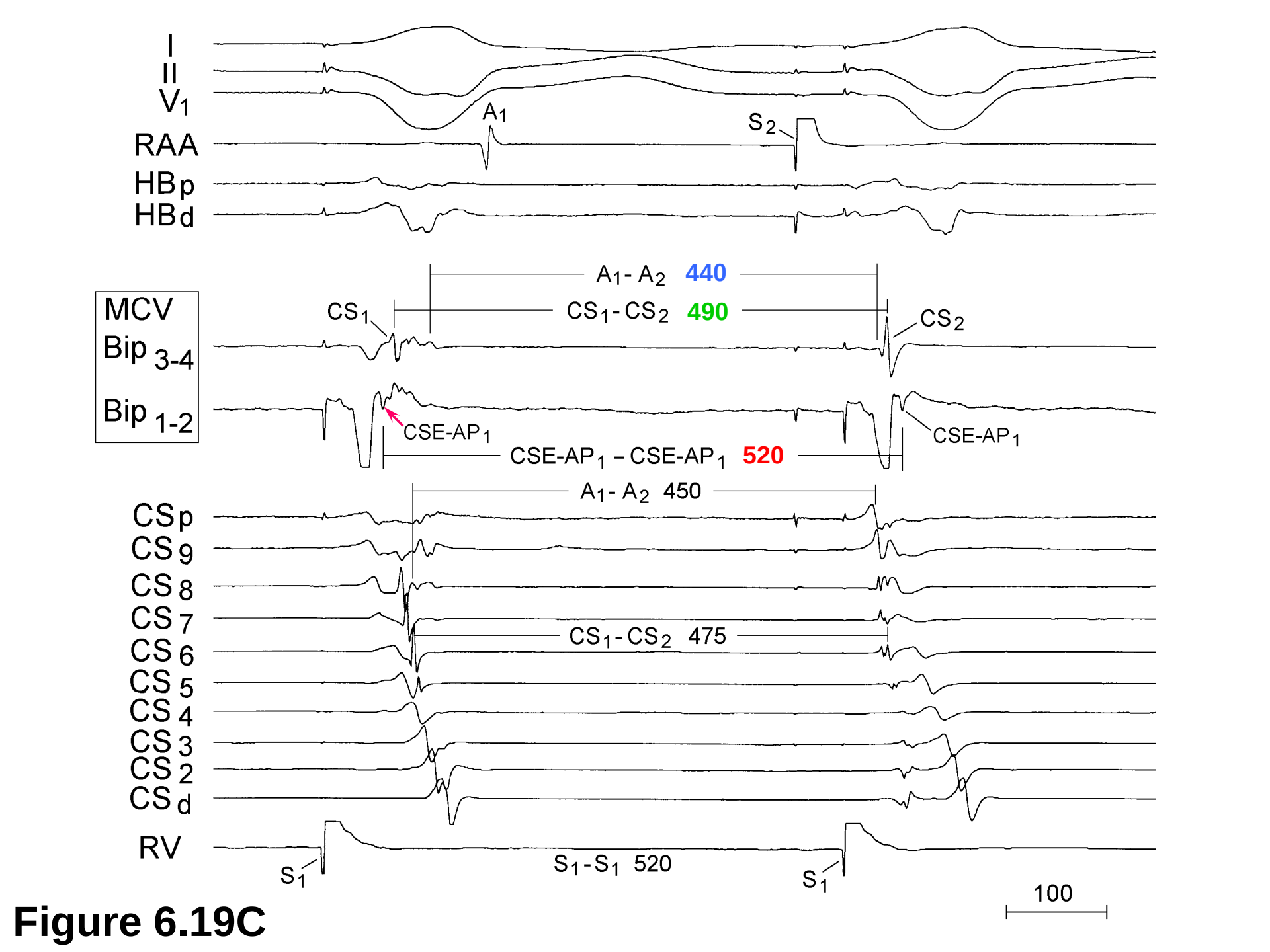

I
II
V1
RAA
HBp
HBd
A1
S2
A1 - A2 440
CS1
CS1 - CS2 490
CS2
MCV
Bip 3-4
Bip 1-2
CSE-AP1
CSE-AP1 – CSE-AP1 520
CSE-AP1
A1 - A2 450
CSp
CS 9
CS 8
CS 7
CS 6
CS 5
CS 4
CS 3
CS 2
CSd
CS1 - CS2 475
RV
S1
S1 - S1 520
S1
100

Figure 6.19C

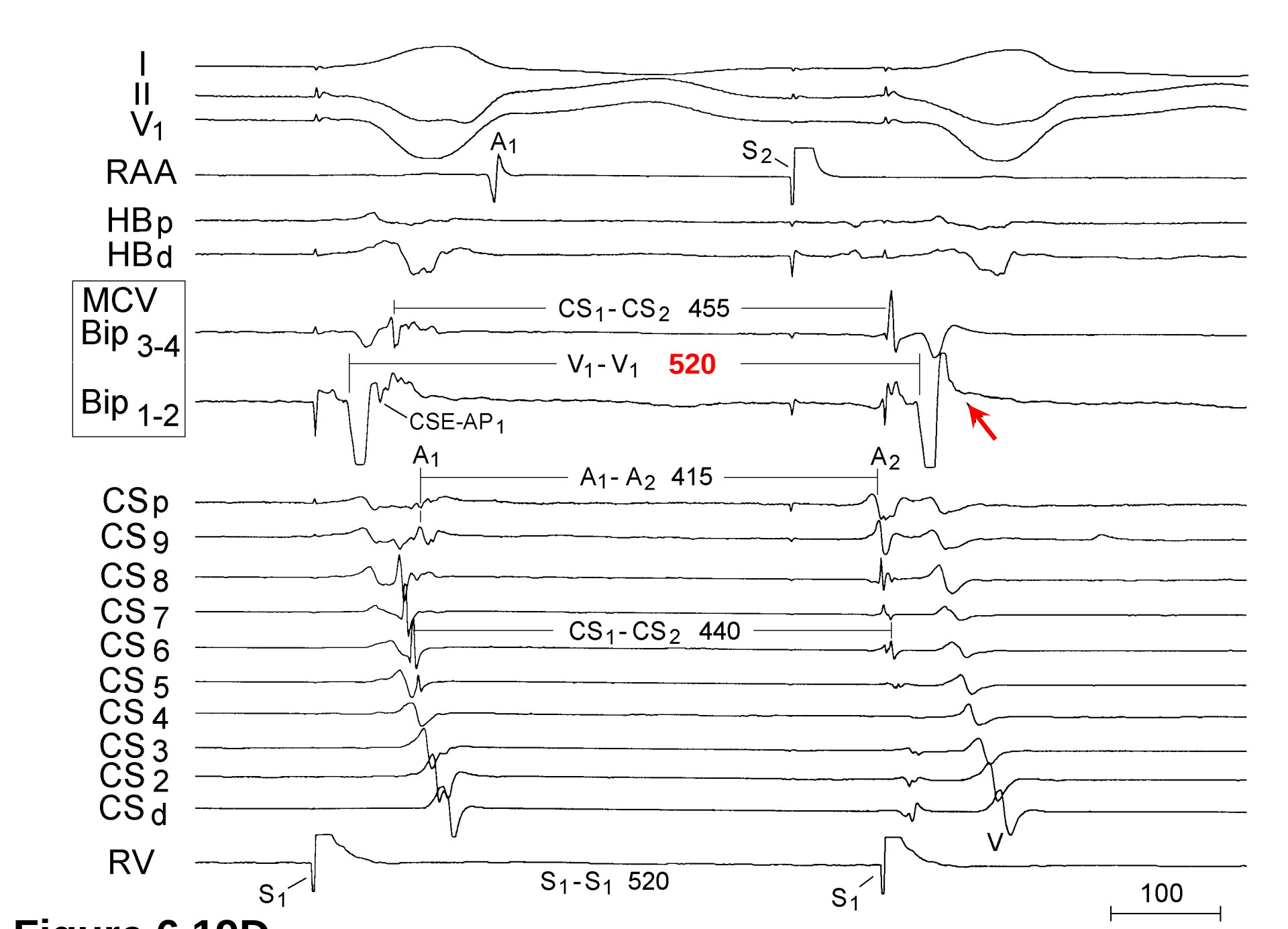

I
II
V1
RAA
HBp
HBd
MCV
Bip 3-4
Bip 1-2
A1
S2
CS1-CS2 455
V1-V1 520
CSE-AP1
A1
A2
A1-A2 415
CSp
CS9
CS8
CS7
CS6
CS5
CS4
CS3
CS2
CSd
CS1-CS2 440
RV
V
S1
S1-S1 520
S1
100

Figure 6.19D

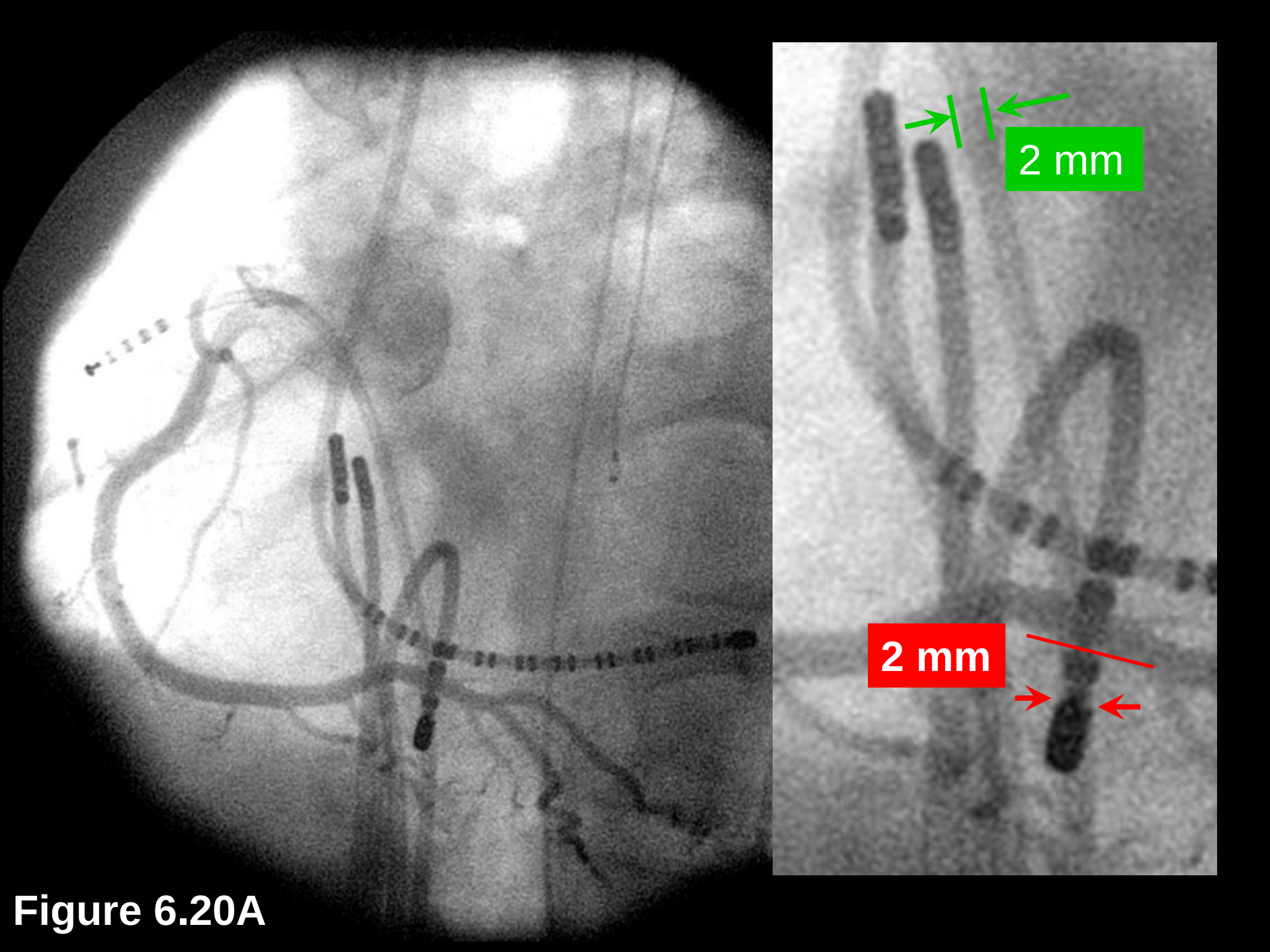


Figure 6.20A

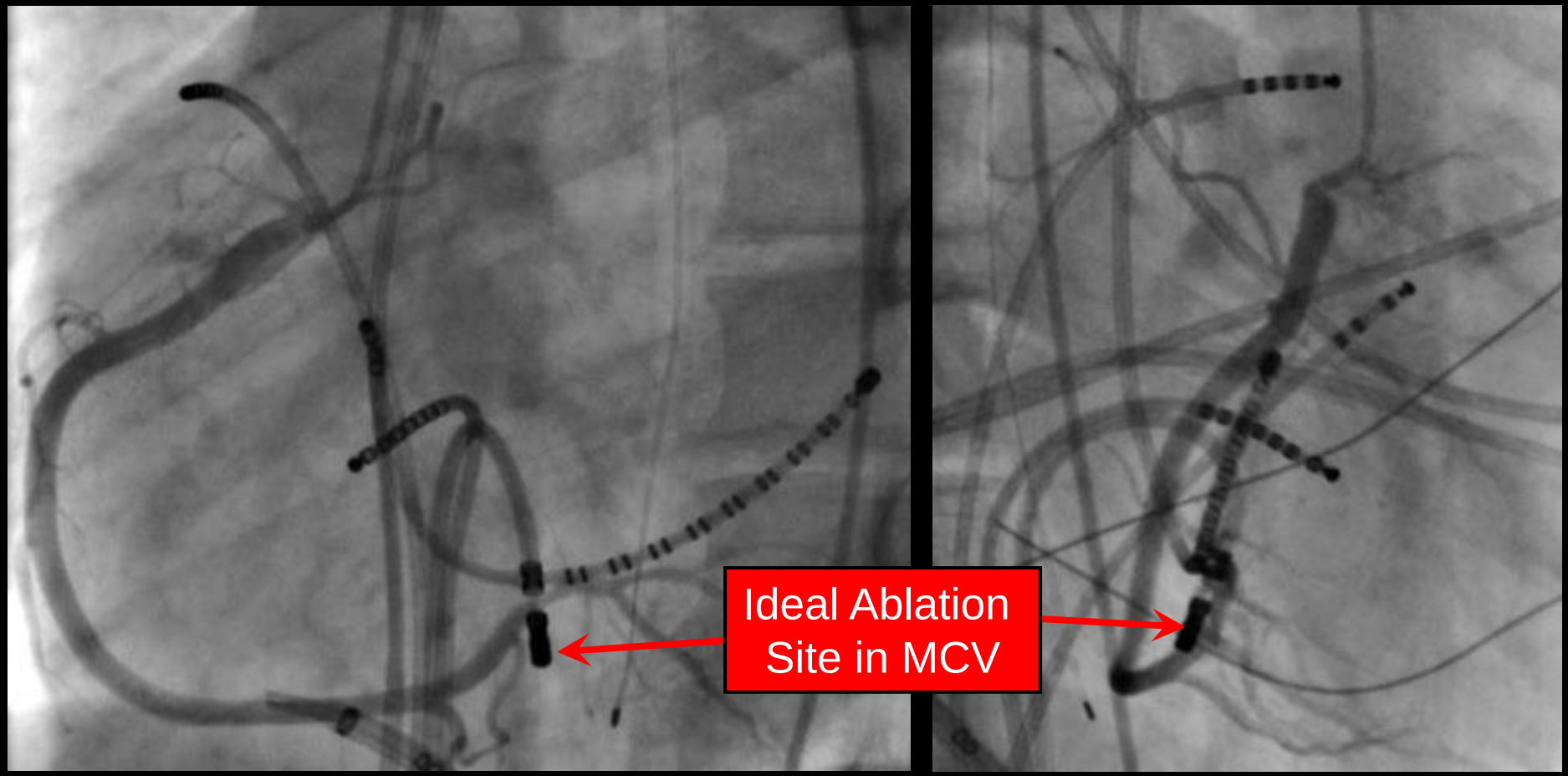


Figure 6.20B

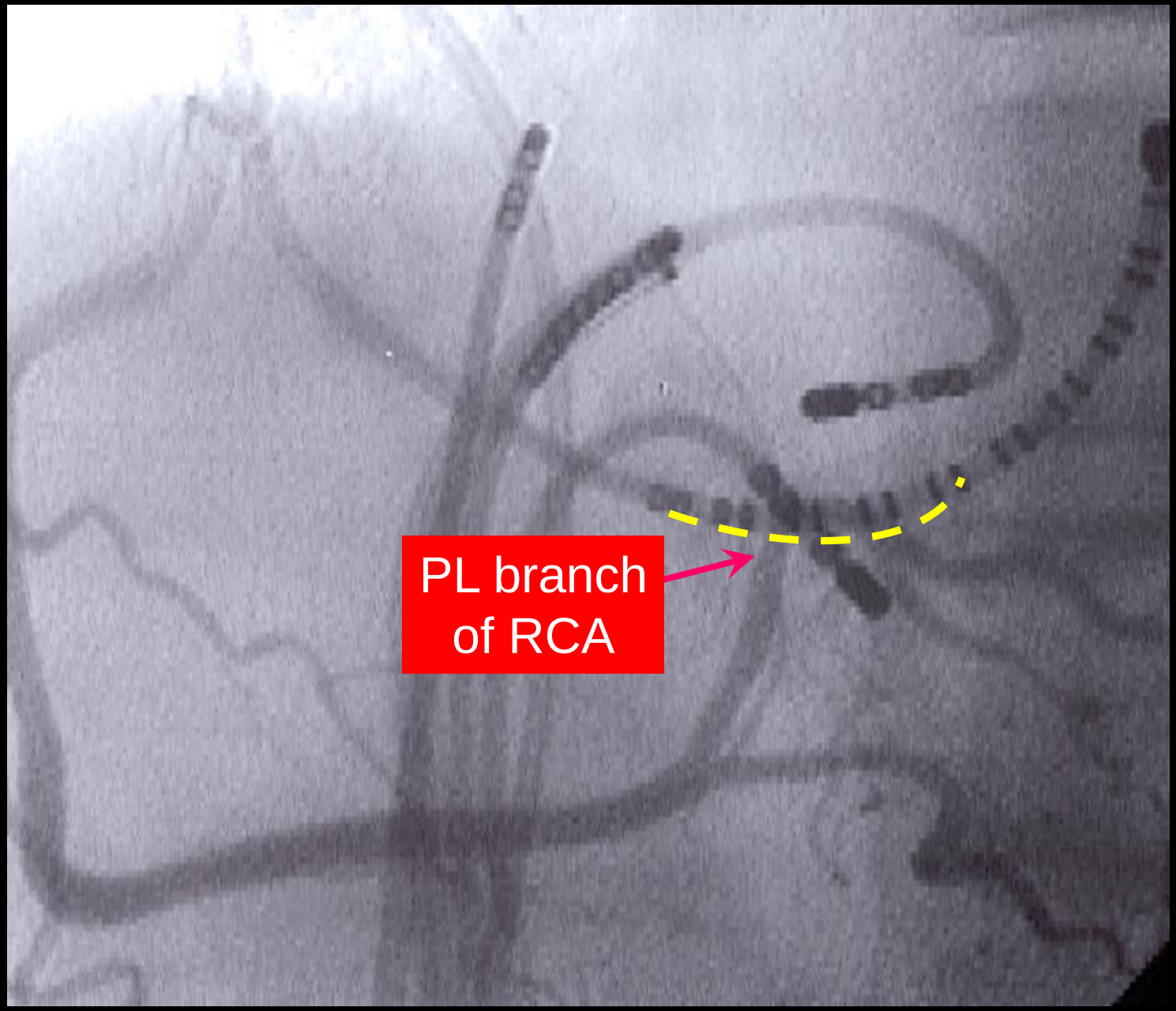


Figure 6.20C LAO

LAO

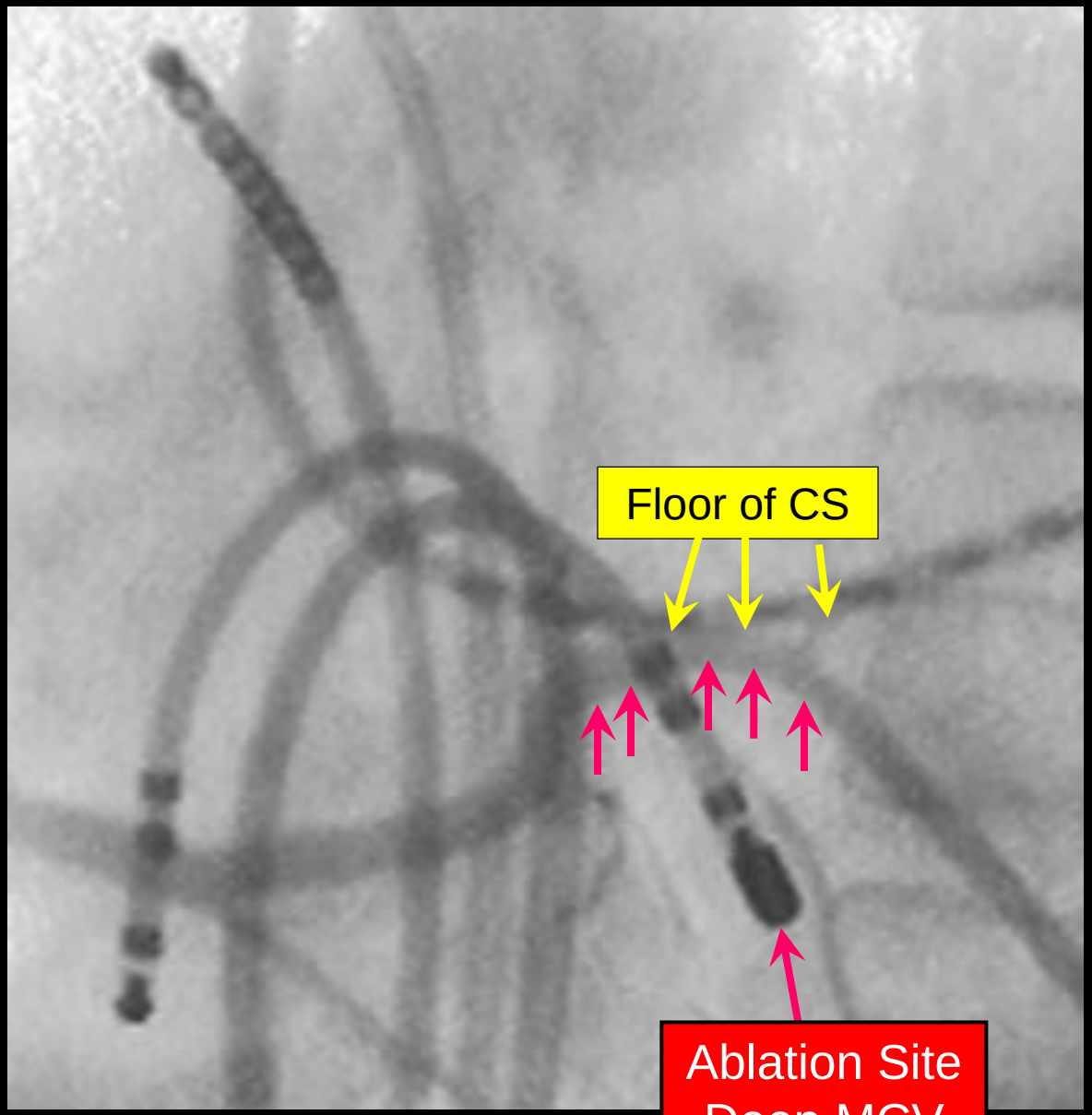


Figure 6.20D

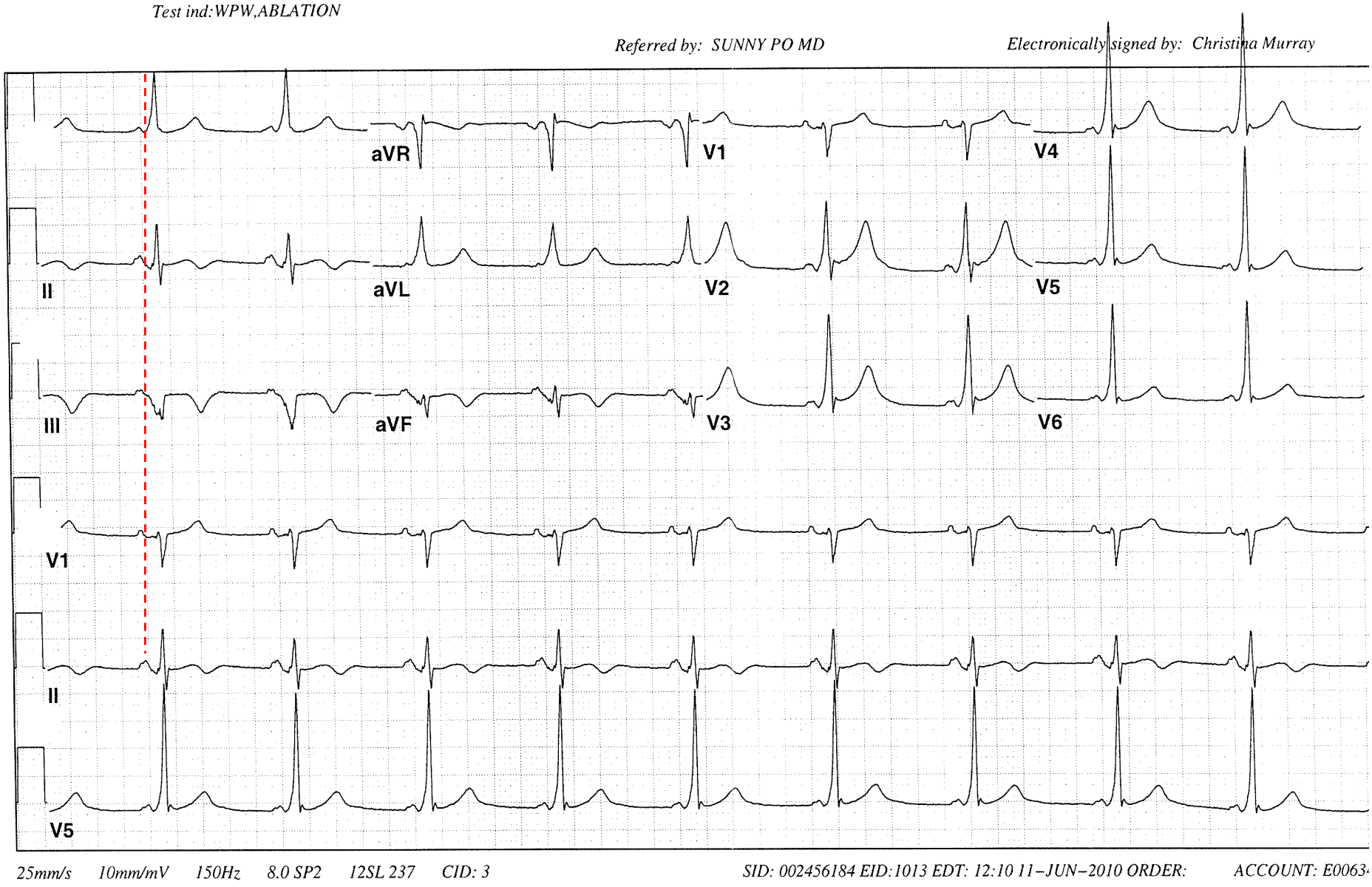

Test ind:WPW,ABLATION
Referred by: SUNNY PO MD
Electronically signed by: Christina Murray
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
V1
II
V5
25mm/s 10mm/mV 150Hz 8.0 SP2 12SL 237 CID: 3
SID: 002456184 EID:1013 EDT: 12:10 11-JUN-2010 ORDER:
ACCOUNT: E0063

Figure 6.21A

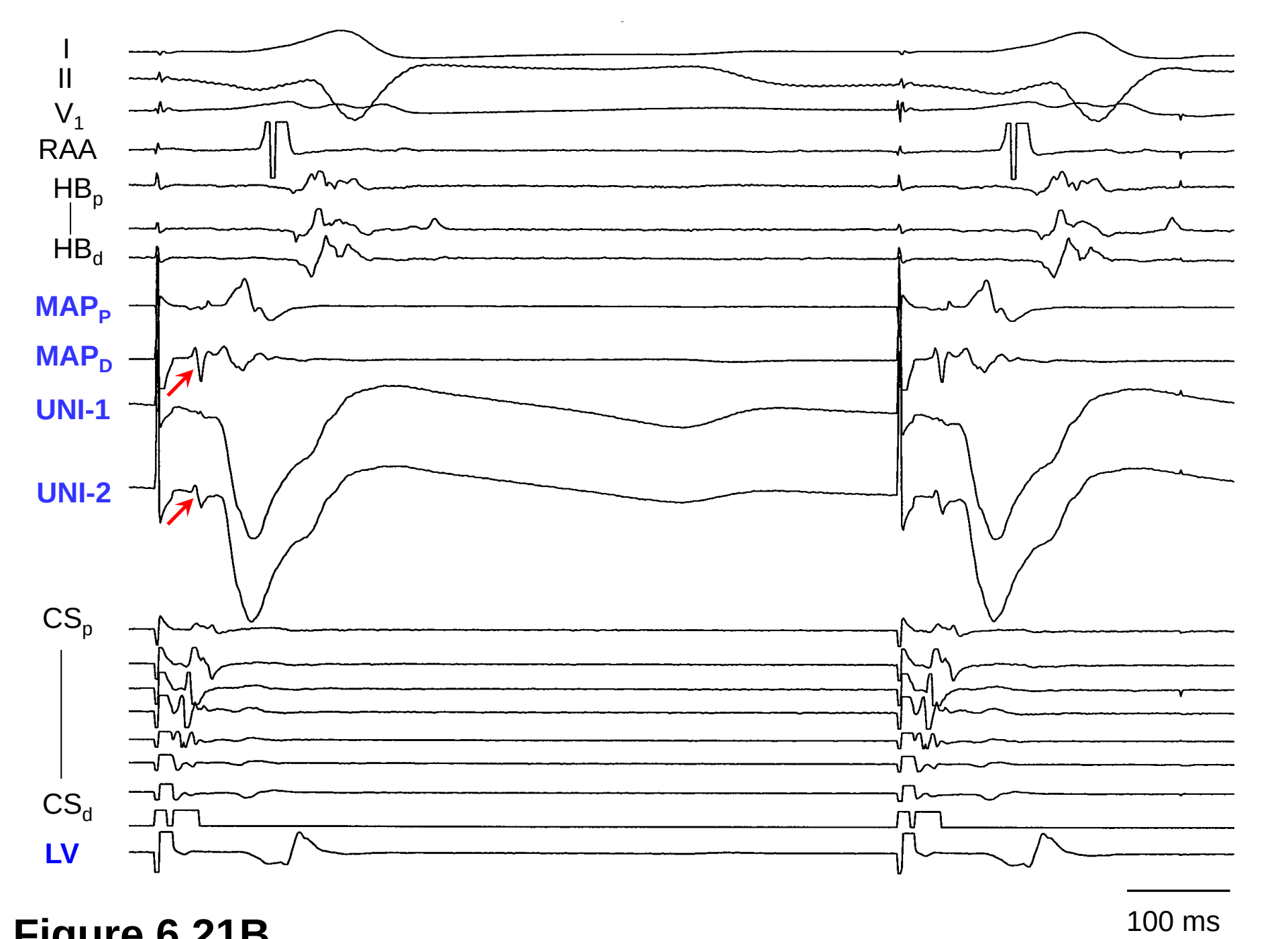


Figure 6.21B

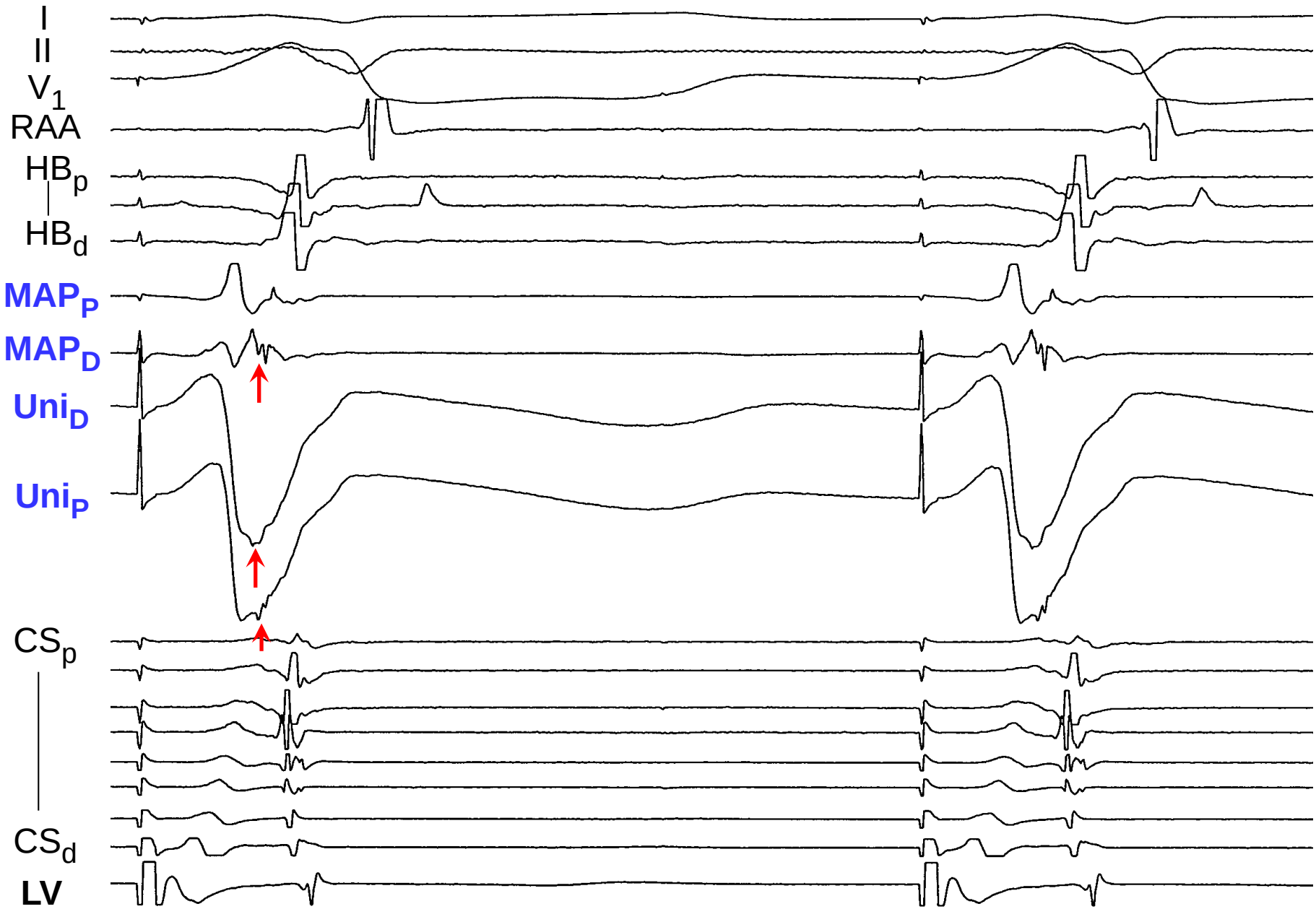


Figure 6.21C

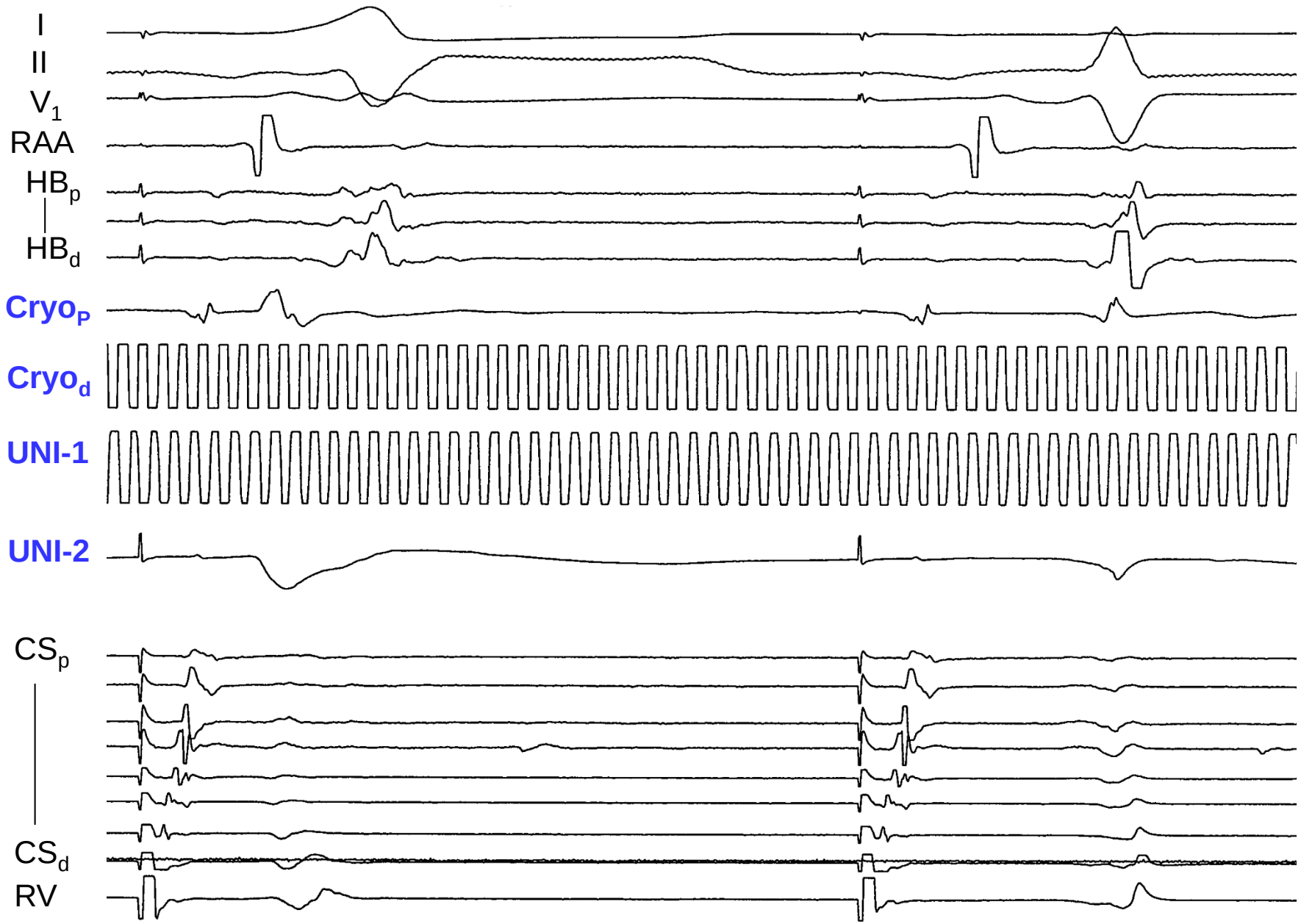


Figure 6.21D

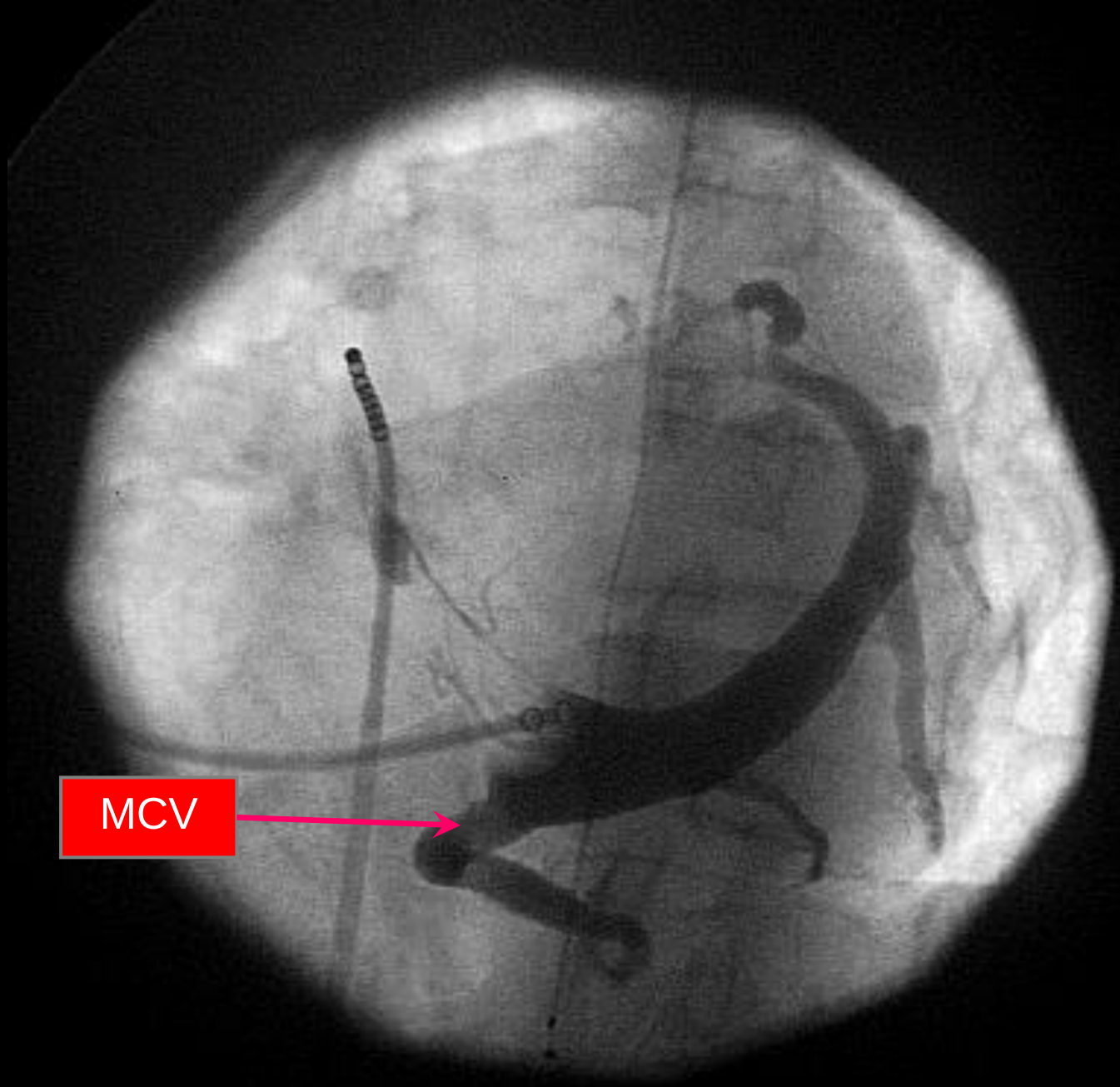


Figure 6.22A

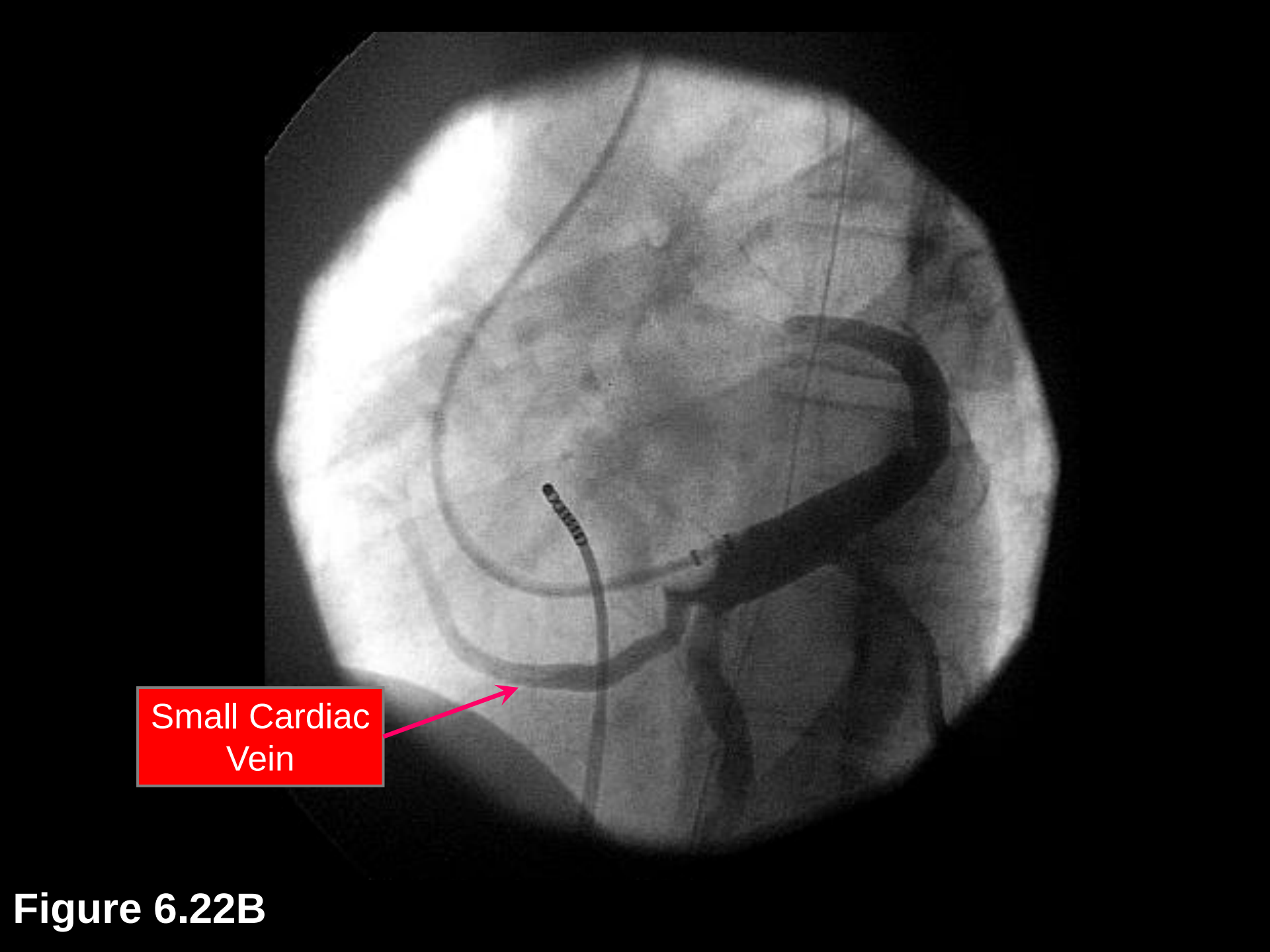


Figure 6.22B