



CATHETER ABLATION OF A RIGHT ATRIAL APPENDAGE TO  
RIGHT VENTRICULAR CONNECTION

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*The Arrhythmia Heart Failure Academy*

The Madras Medical Mission



19 years-old male with on and off palpitations for 12 years

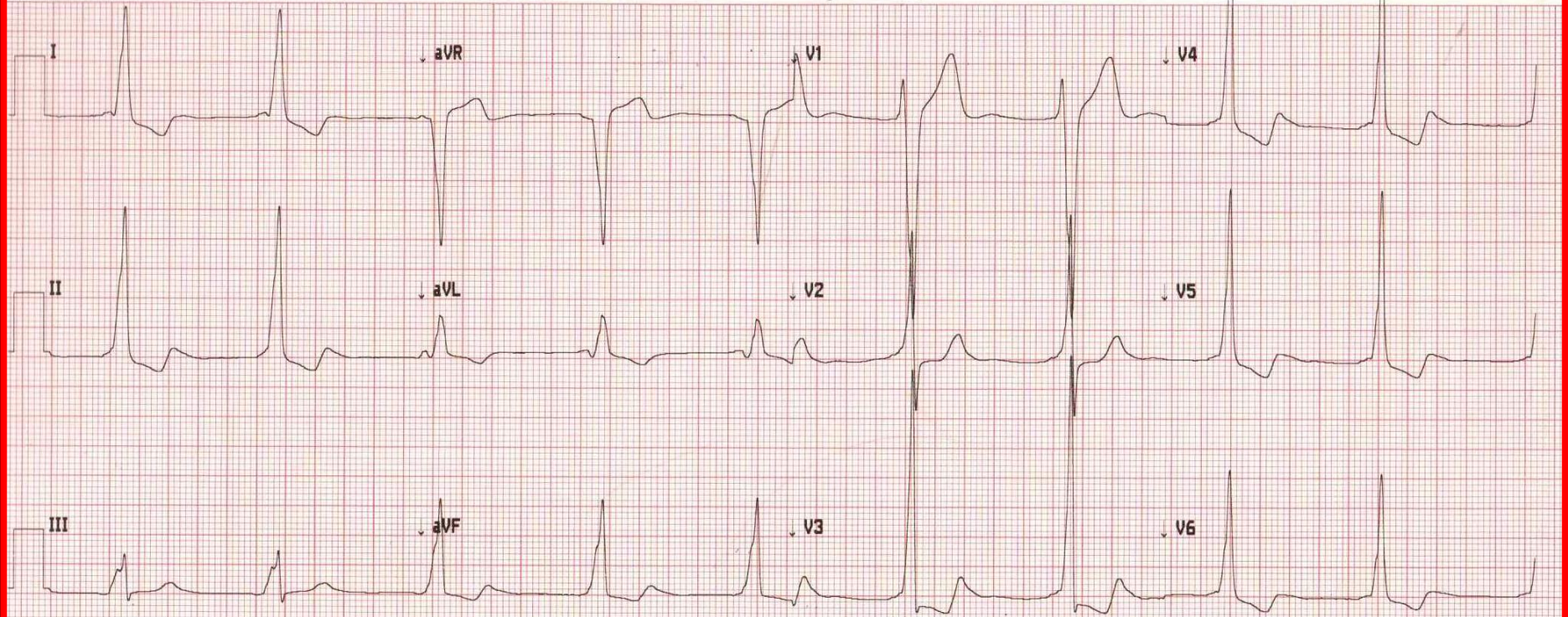
Attempted RFA at 10 years of age elsewhere

Echo: Normal study

# BASELINE ECG

Technician : KRISH

QT/QTc 534/526 ms  
P-R-T axes \* 45 166

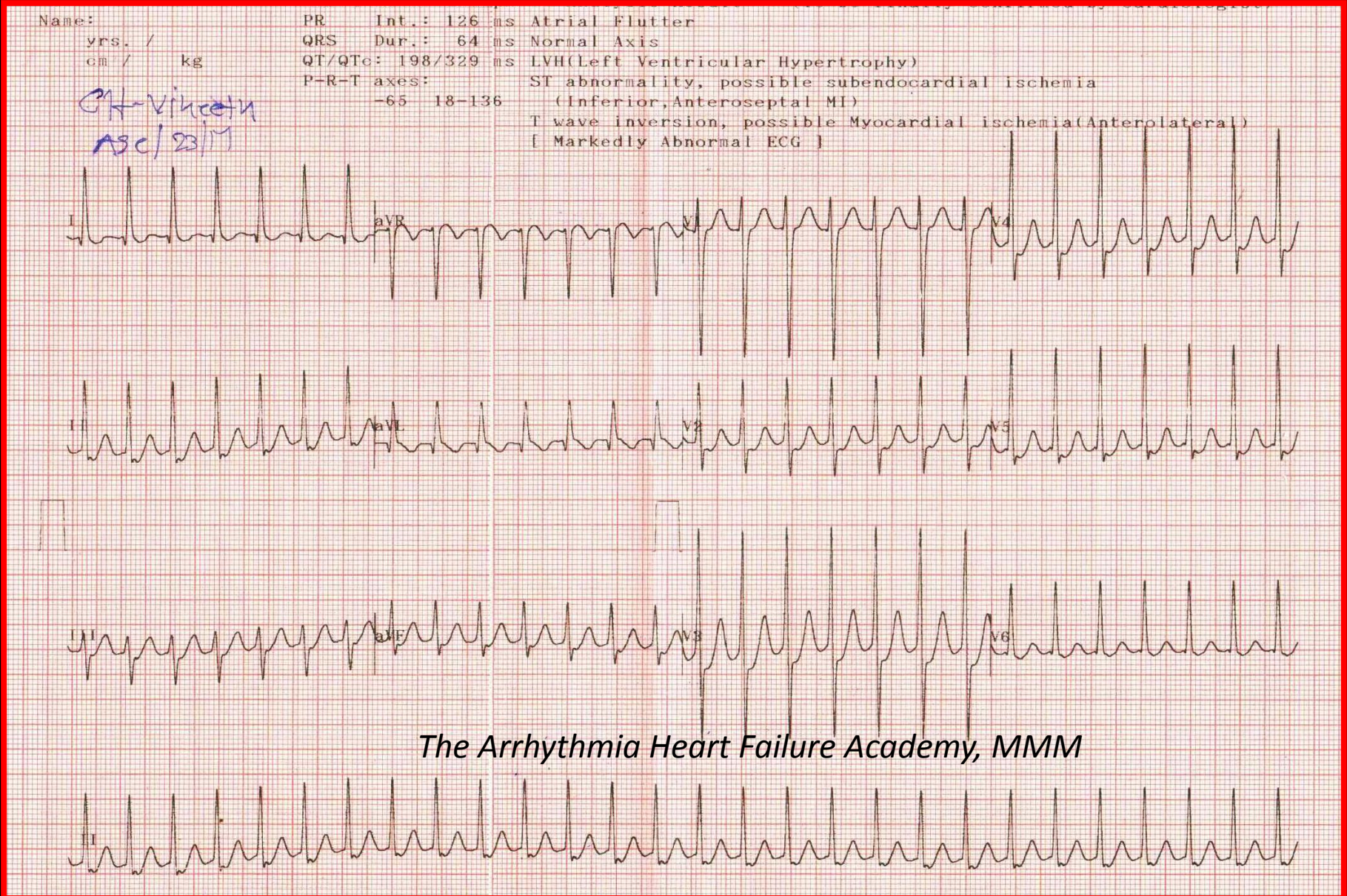


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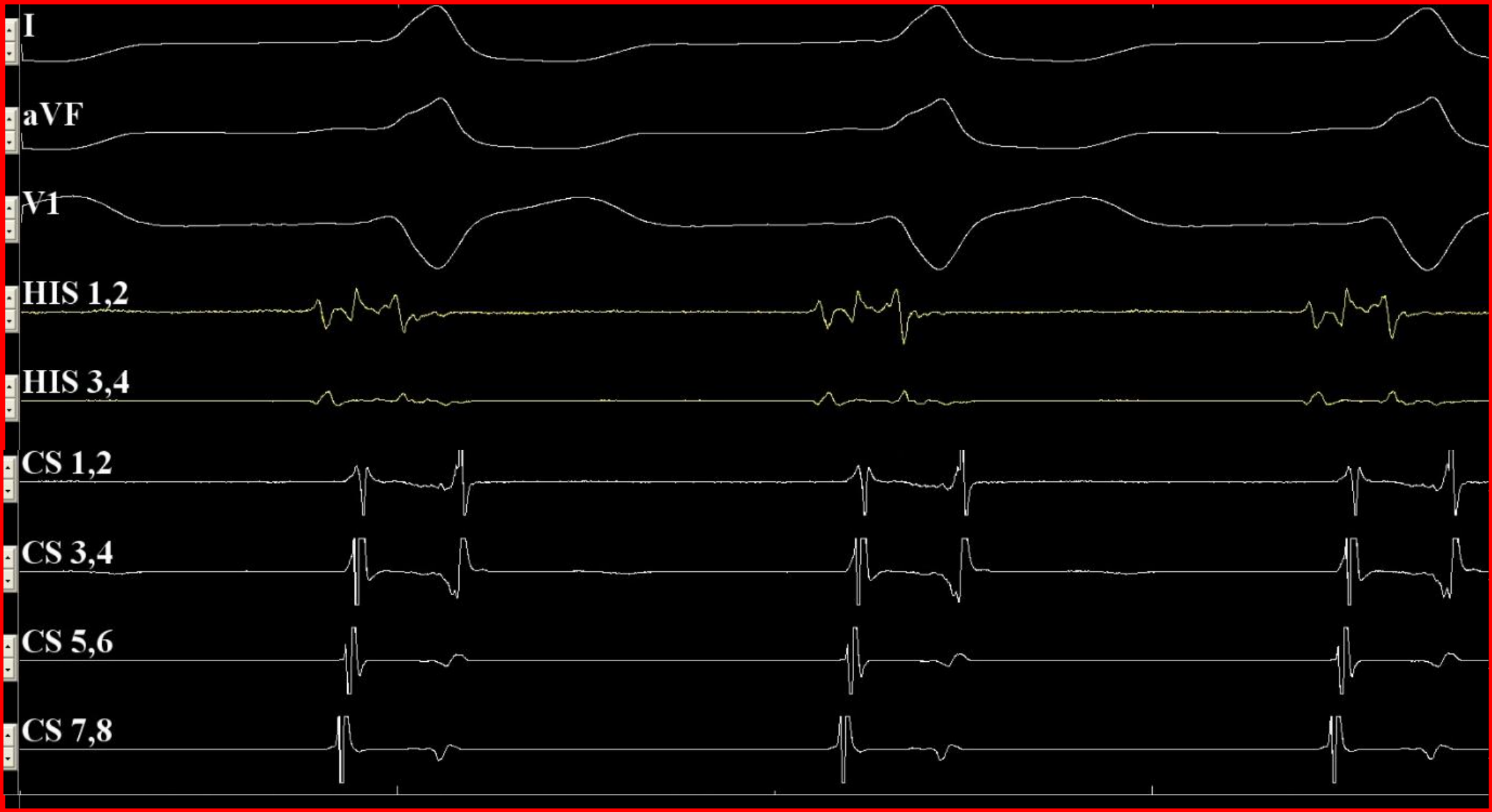


19y/M 20/09/2018 @ 08:55:15

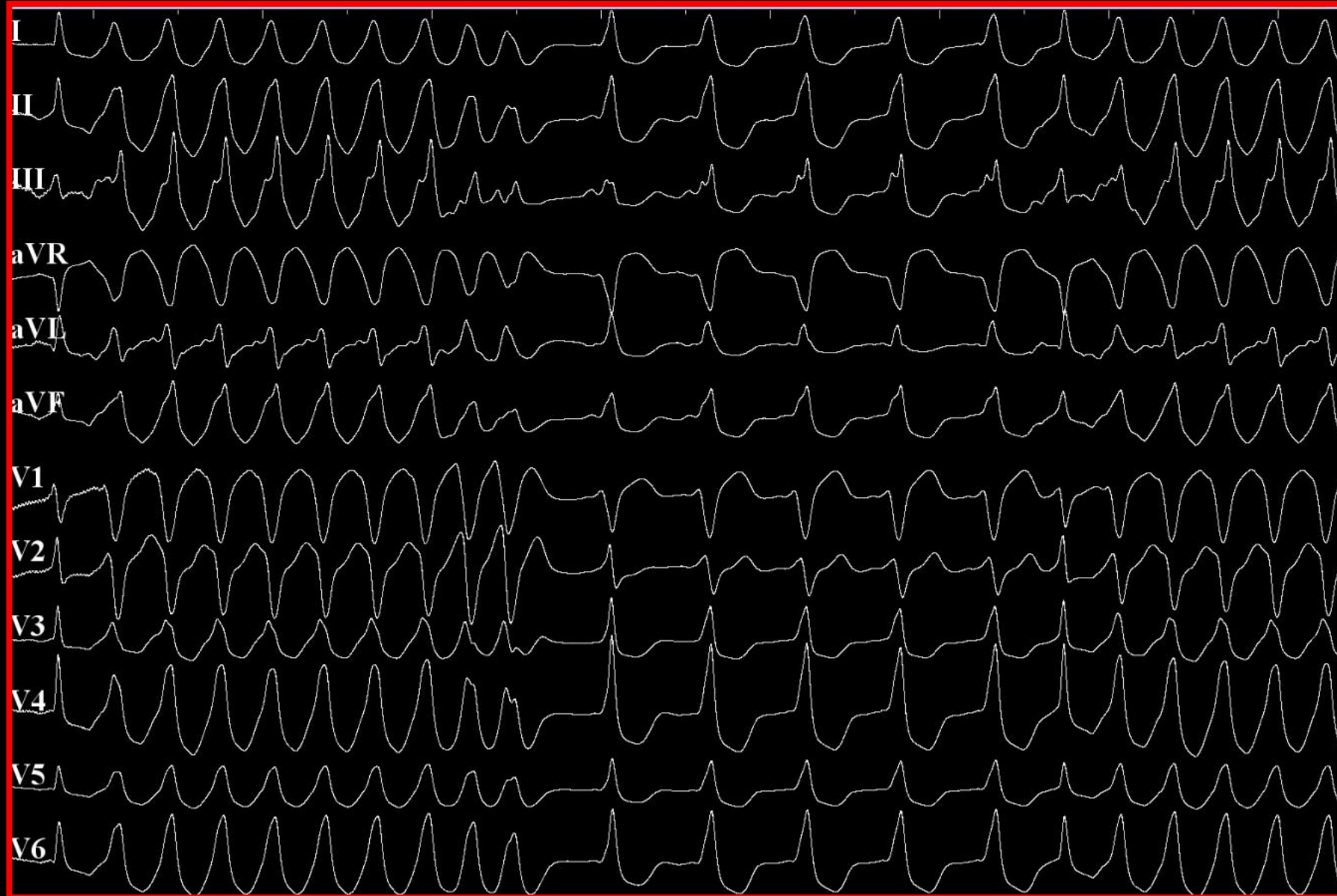
# ECG DURING TACHYCARDIA



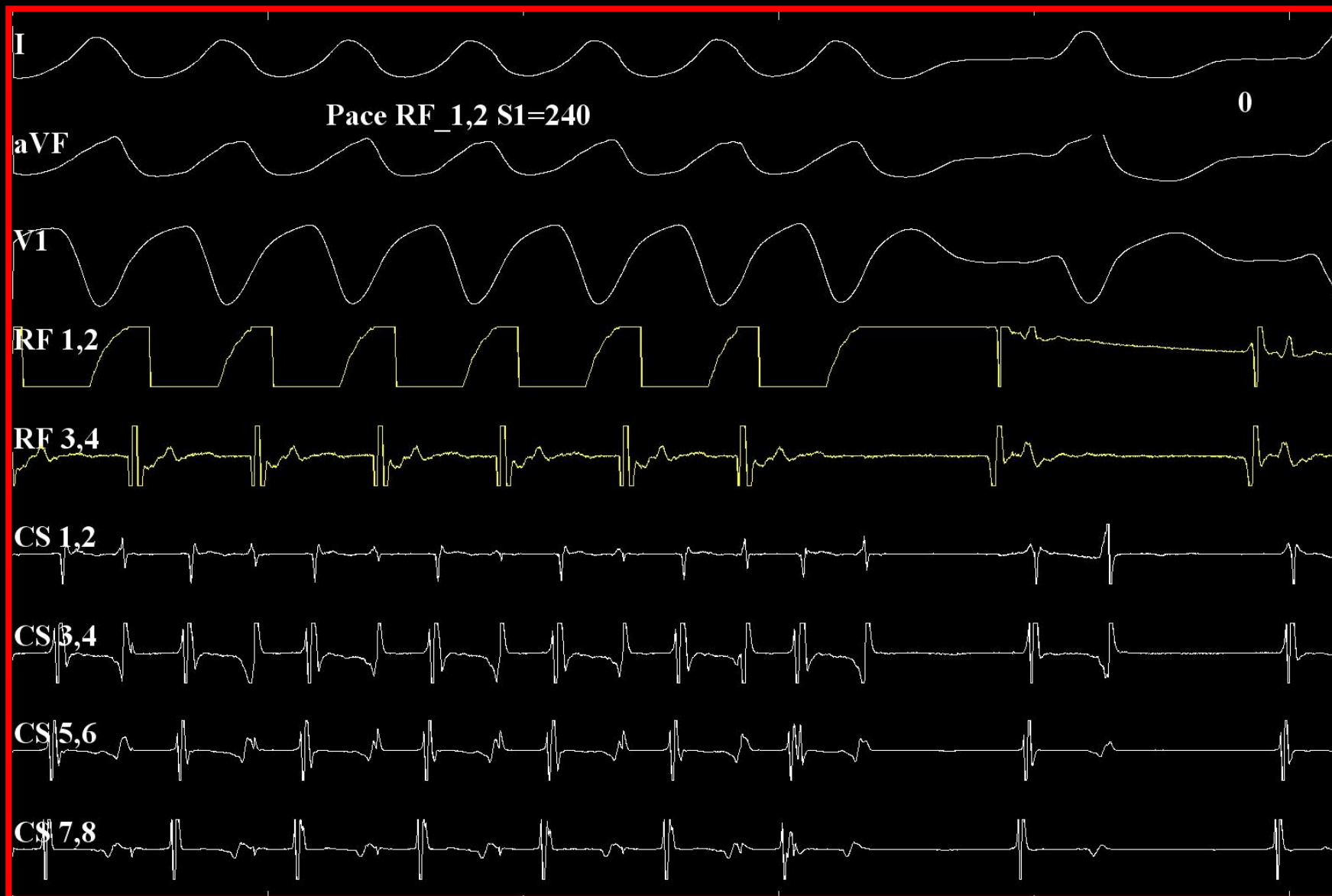
# BASAL INTERVALS



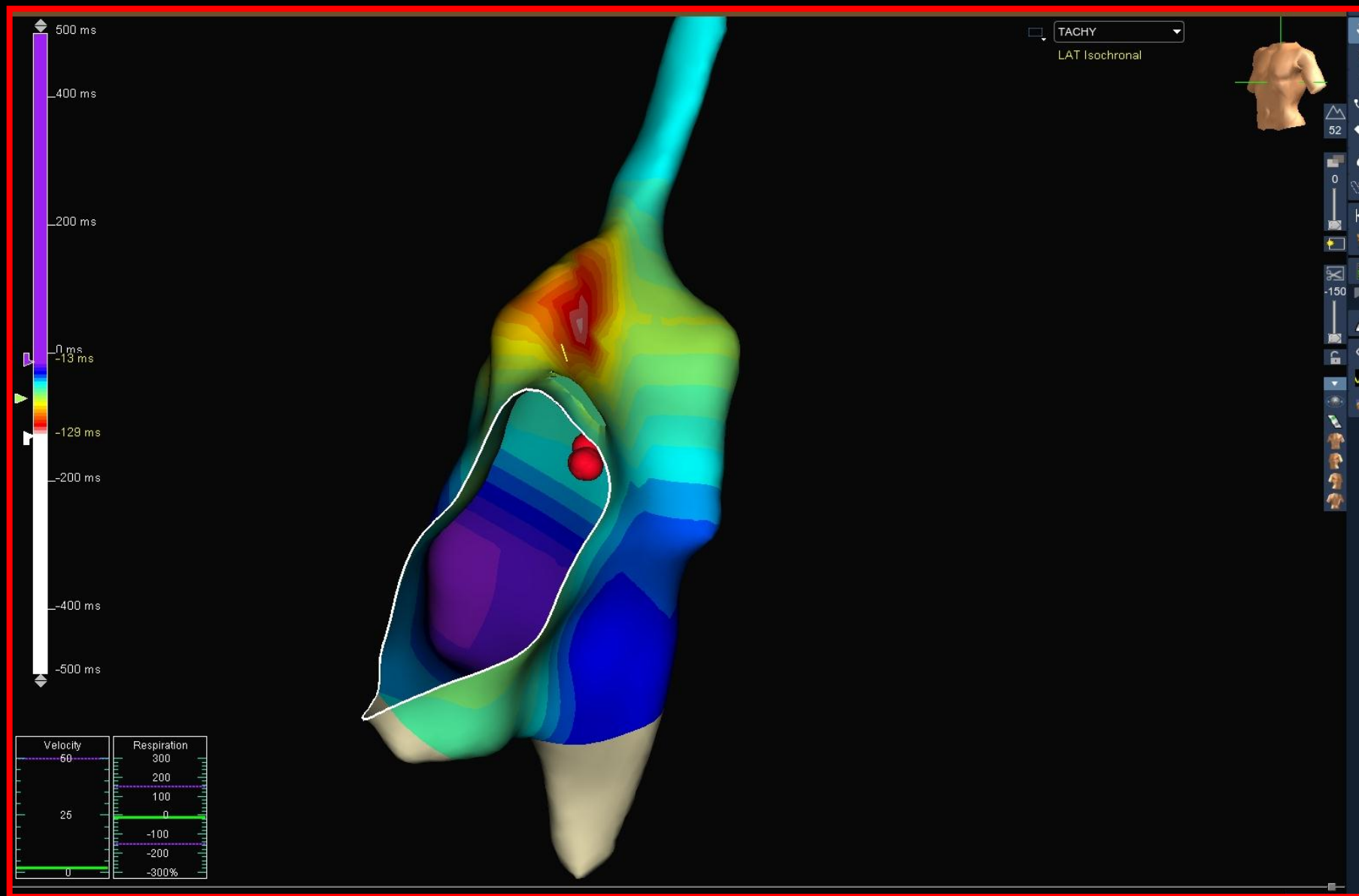
# MORPHOLOGY DURING MAXIMUM PRE-EXCITATION



# PATHWAY REFRACTORY PERIOD <240



# 3-D MAPPING Ensite Precision



I

MAPPING DURING TACHYCARDIA@RAA

aVF

V1

HIS 1,2

HIS 3,4

RF 1,2

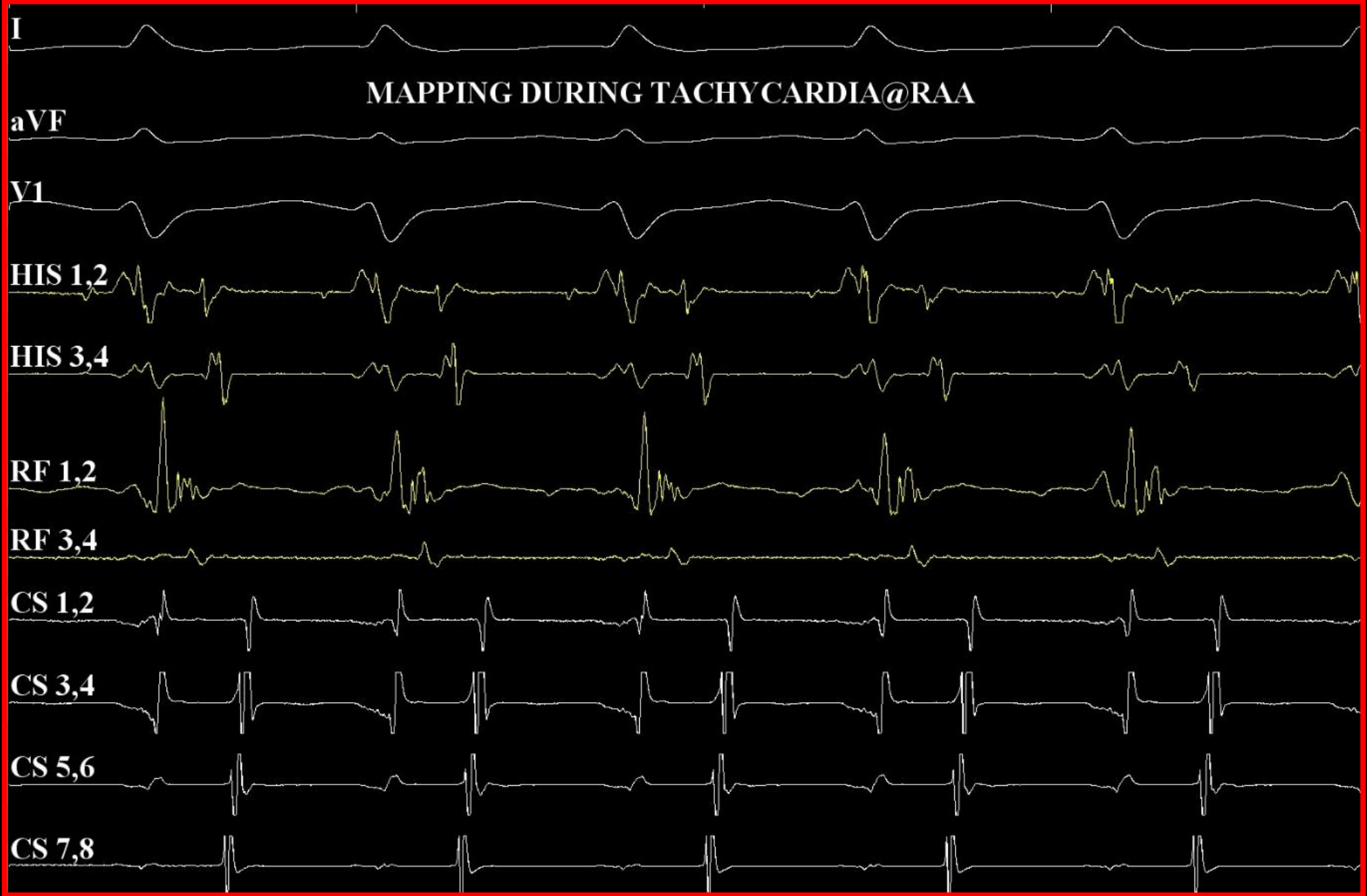
RF 3,4

CS 1,2

CS 3,4

CS 5,6

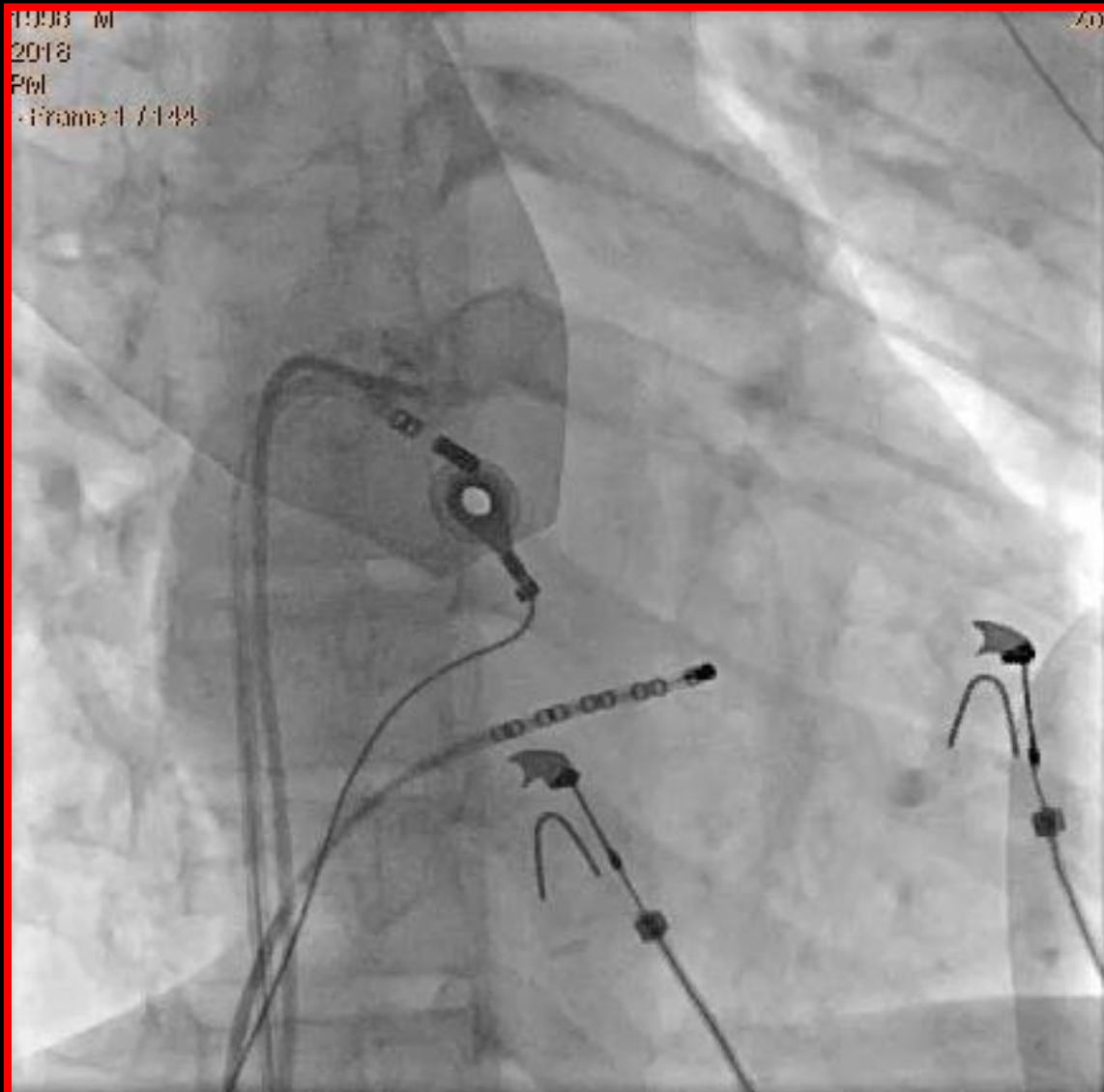
CS 7,8



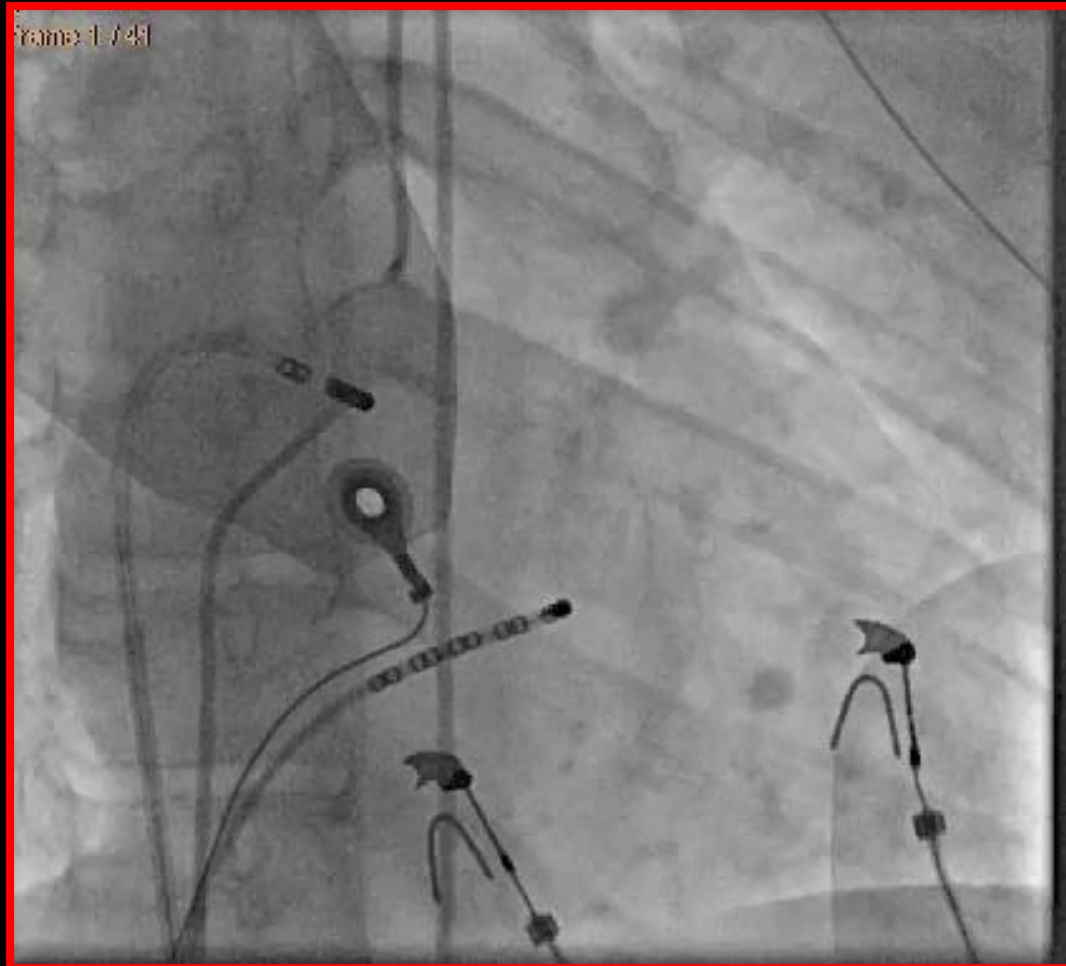


# RAO VIEW

# LAO VIEW



# RAO VIEW



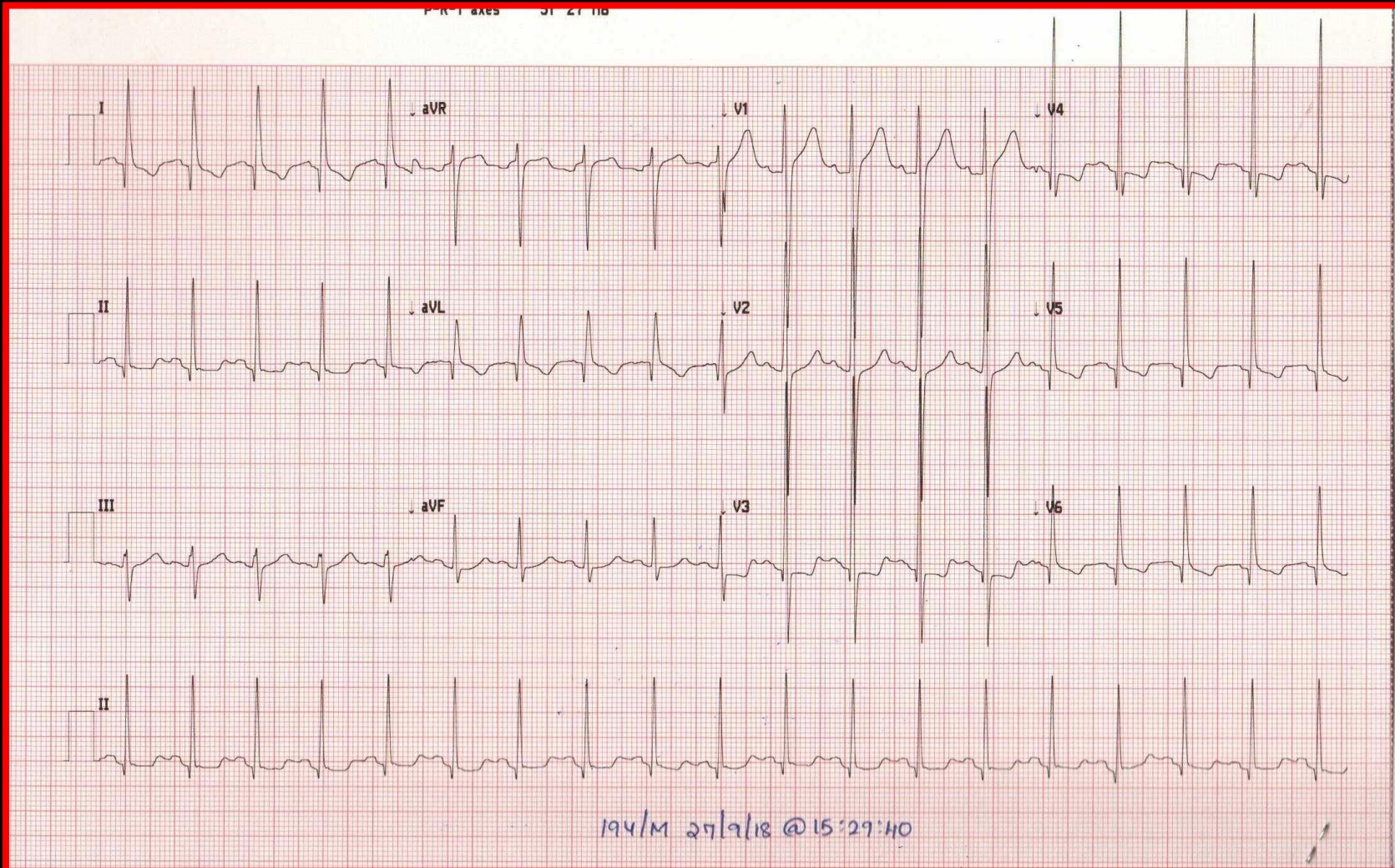
# LAO VIEW





**Flexibility Irrigation Catheter used**

# POST RFA



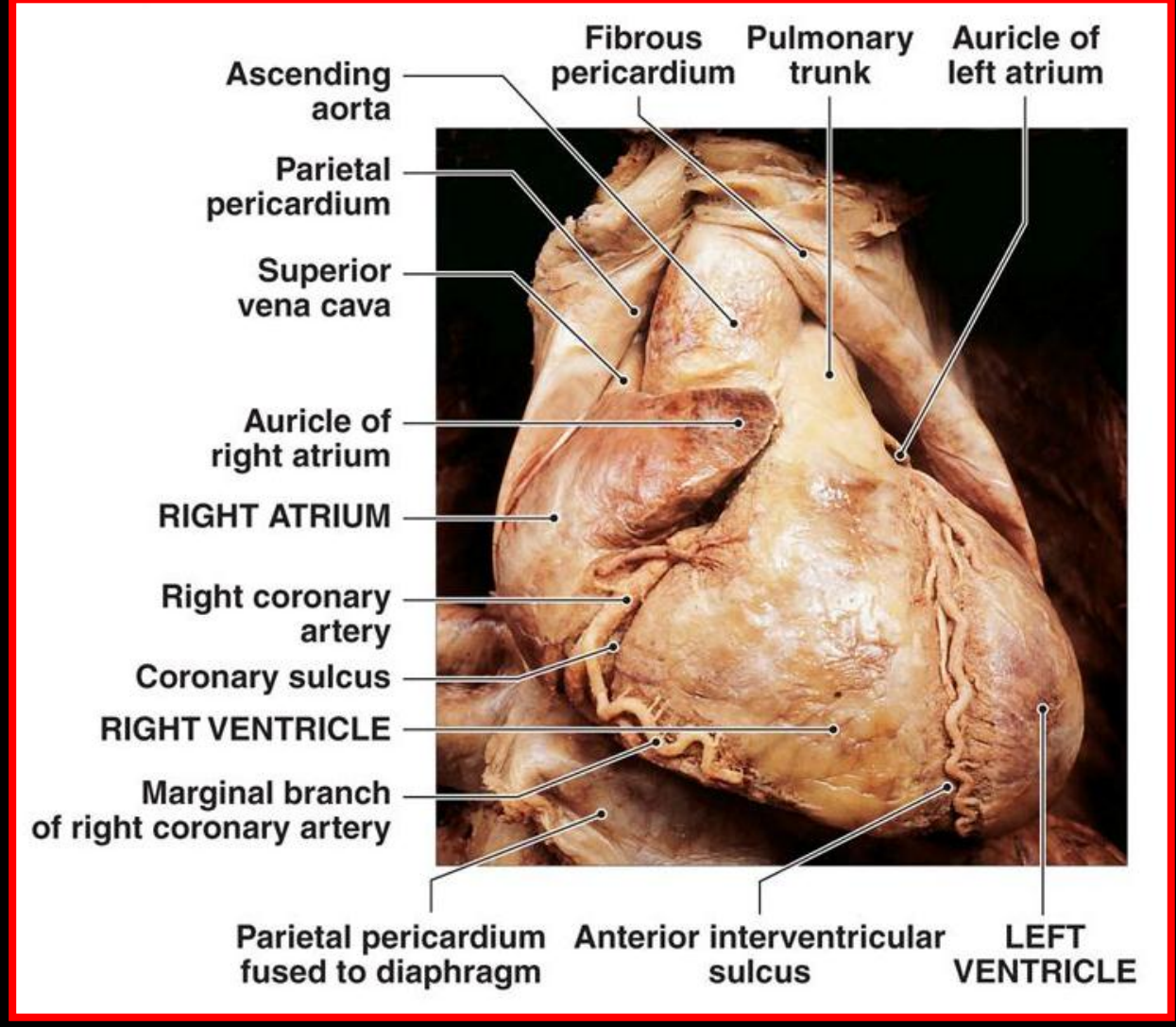
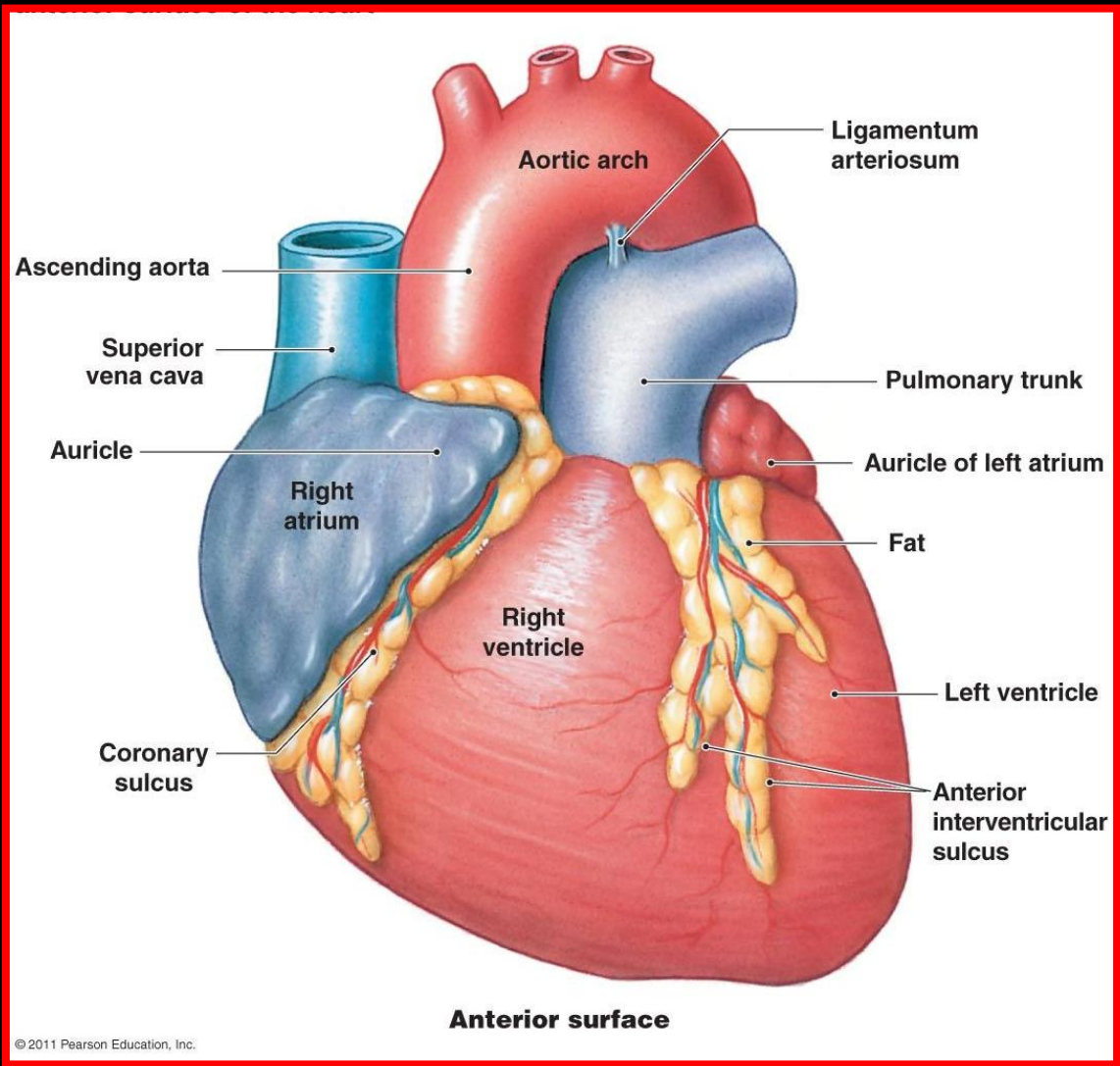
**NO RECURRENCE  
ON FOLLOW UP**

## RELATION BETWEEN RAA AND RV

Tip of right atrial appendage is anterior and superior

Overlying anterosuperior aspect of AV groove

Band-like muscular structure extending from the underside of the right atrial appendage to the right ventricle



## DIFFICULTIES

Trabeculations prevent adequate contact between catheter and tissue

Multiple energies are required - epicardial pathway

Exact localization of the accessory pathway by 12-lead ECG criteria is difficult in the absence of a true right AV valve annulus

Thin wall - easily perforate

3-D Electroanatomical mapping plays an essential role

## FEATURES SUGGESTIVE OF THIS VARIANT PATHWAY

A preexcitation pattern indicative of a right anterior or right anterolateral accessory pathway

Retrograde atrial activation recorded earlier in the right atrial appendage than at the tricuspid annulus

Failed or transient loss of pathway conduction with RF delivery at the tricuspid annulus

Need for high-energy delivery within the appendage to achieve permanent pathway elimination



THANK YOU

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