




PVC ABLATION

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The background features a dark blue gradient with faint, light blue circular patterns and a scale. The scale is a semi-circular arc on the left side, with numerical markings from 150 to 260 in increments of 10. There are also several concentric circles and dashed lines with arrows, suggesting a technical or scientific theme.

CONSULTANT AND SPEAKER BIOSENSE
WEBSTER

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AUSTIN, TX

GOALS

- Indication for PVC ablation
- Standard intracardiac mapping
- Use of 3D Mapping
- Use of intracardiac echo
- Ablation catheter/ power settings

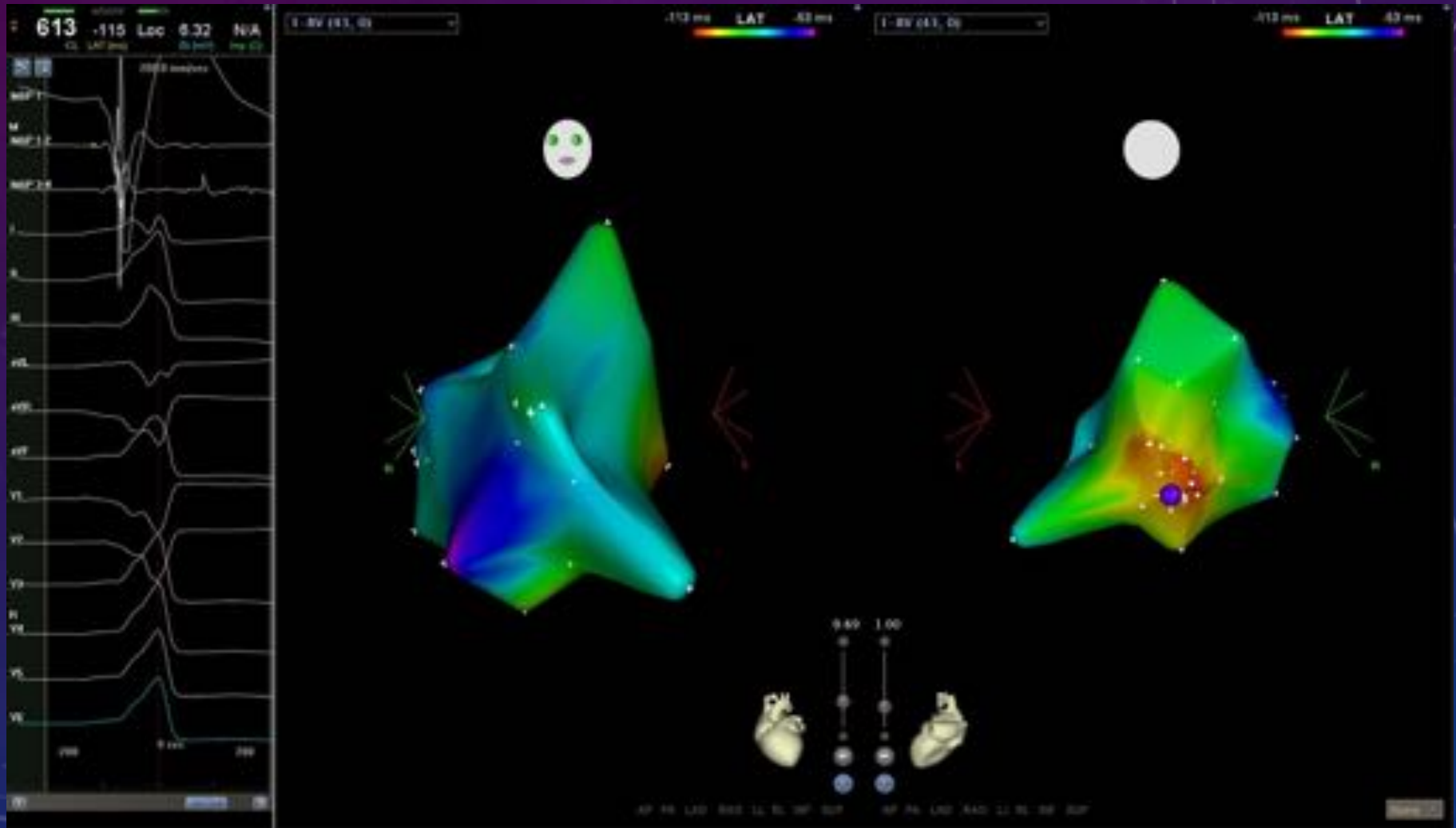
HISTORY

- 72 years old female, with HTN and hyperlipidemia; previous right breast lumpectomy (no chemo- or radiotherapy)
- Palpitations and DOE
 - ECG: SR with bigeminal PVC and runs of NSVT (“monomorphic”)
 - ECHO: diffuse LV hypokinesis with moderately-low EF (40 %)
 - Cath: moderate 1V disease (first diagonal)
- She’s started on amiodarone (oral loading) and BB (metoprolol 50 mg BID) without substantial benefit > referred to our center for evaluation (RF?)

ECG



3D-MAPPING IN THE RVOT

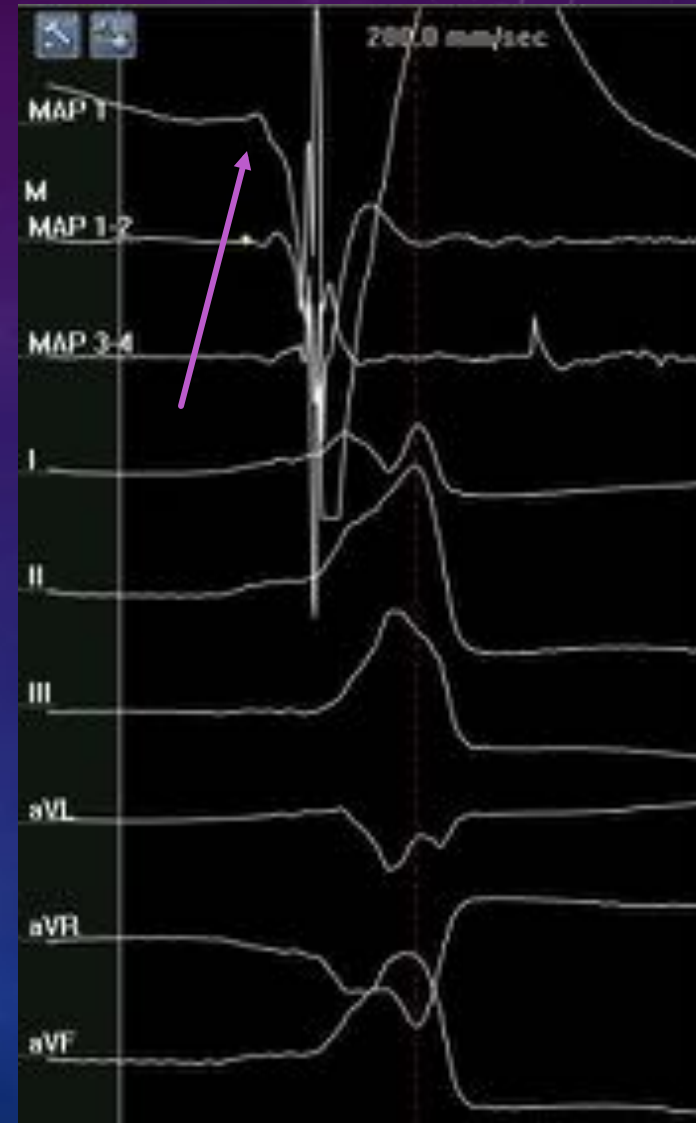
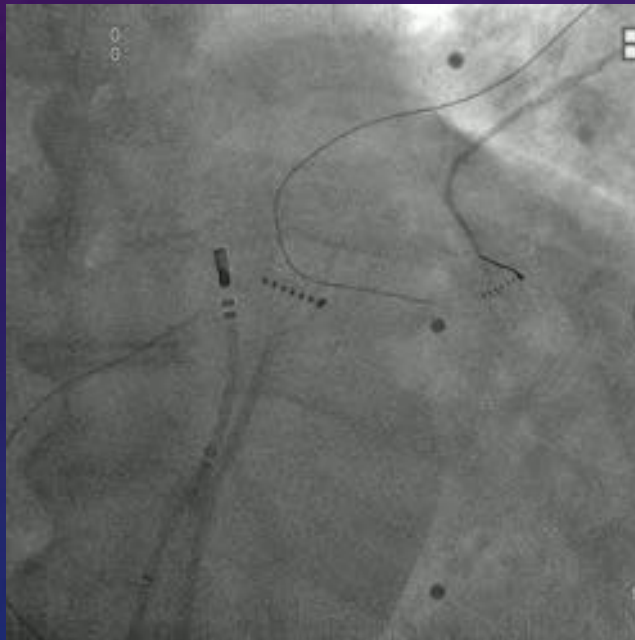


MAPPING IN THE RVOT (POSTEROSEPTAL)

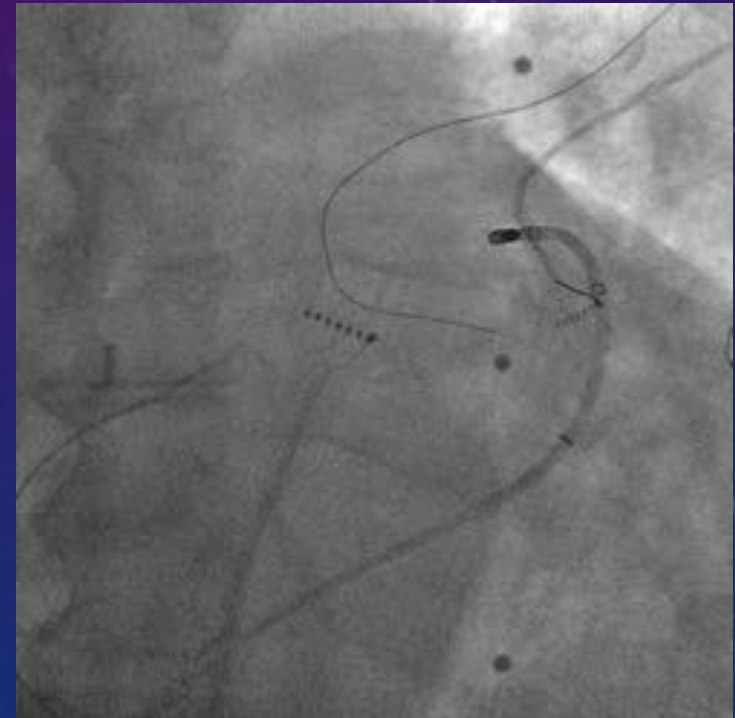
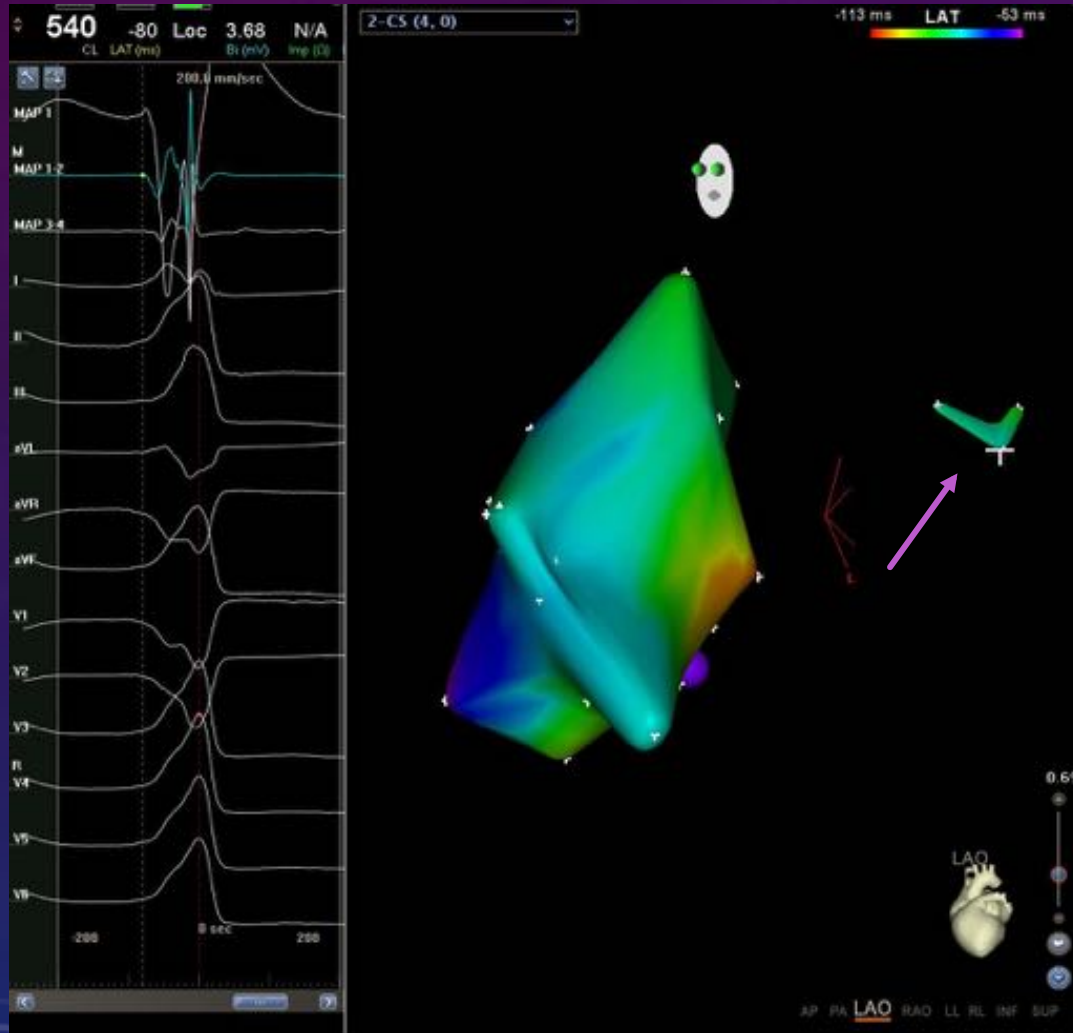


MAPPING IN THE RVOT

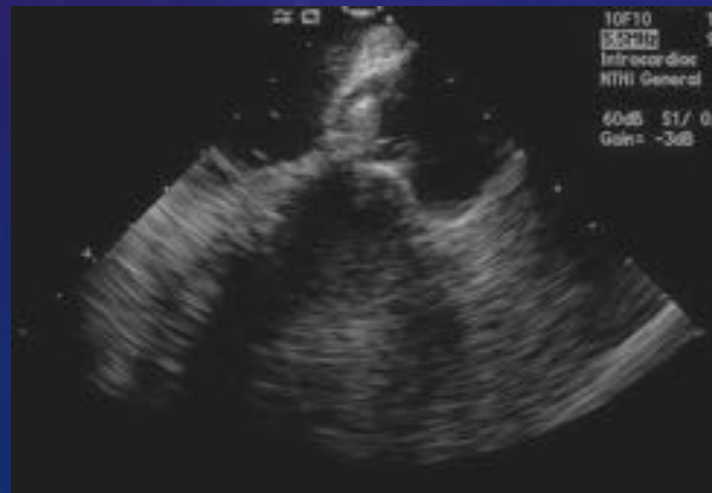
- Earliest V 28 msec pre-QRS
- R on unipolar



3D-MAPPING IN THE CS/GREAT CARDIAC VEIN/ANTERIOR IV VEIN



3D-MAPPING IN THE NCC



MAPPING IN THE CUSPS AND THE LVOT

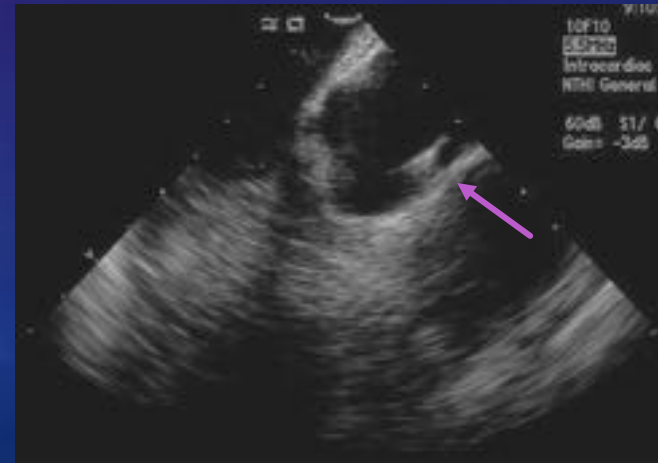


MAPPING IN THE LCC/RCC AREA



MAPPING IN THE LVOT

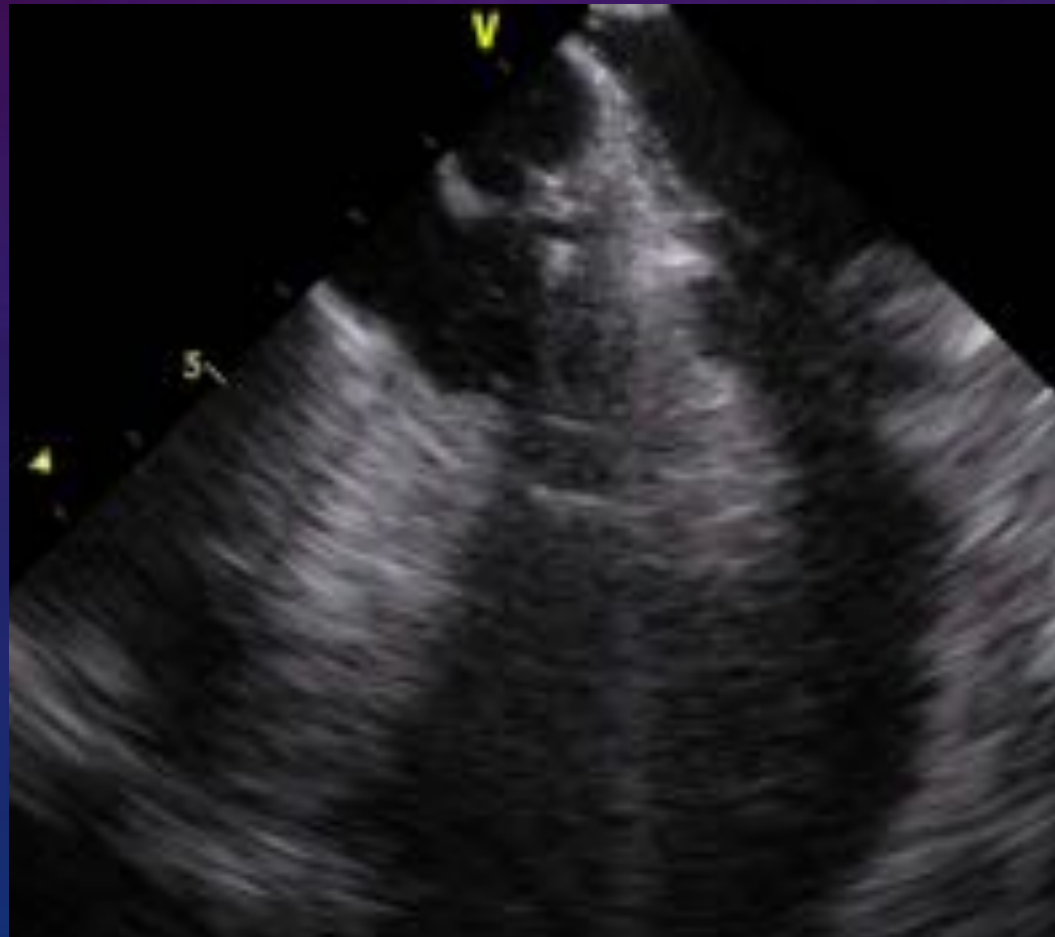
- Earliest V 44 msec pre-QRS
- Between the LCC and RCC
- QS on unipolar
- RF 40 W (irrigated tip)



INTRACARDIAC ECHO LCC/RCC JUNCTION



INTRACARDIAC ECHO LCC/RCC JUNCTION



INTRACARDIAC ECHO SURVEY FROM RVOT

- Home view
- Counter-clocking
 - Right Atrial Appendage and tricuspid valve
- Deflect anterior, advance, un-deflect
 - RV/Liver, RV Apex
- Clocking
 - LV, septal papillary m, lateral papillary m, LAA, LAA/LPV ridge/
Cusps (long axis of ascending aorta)

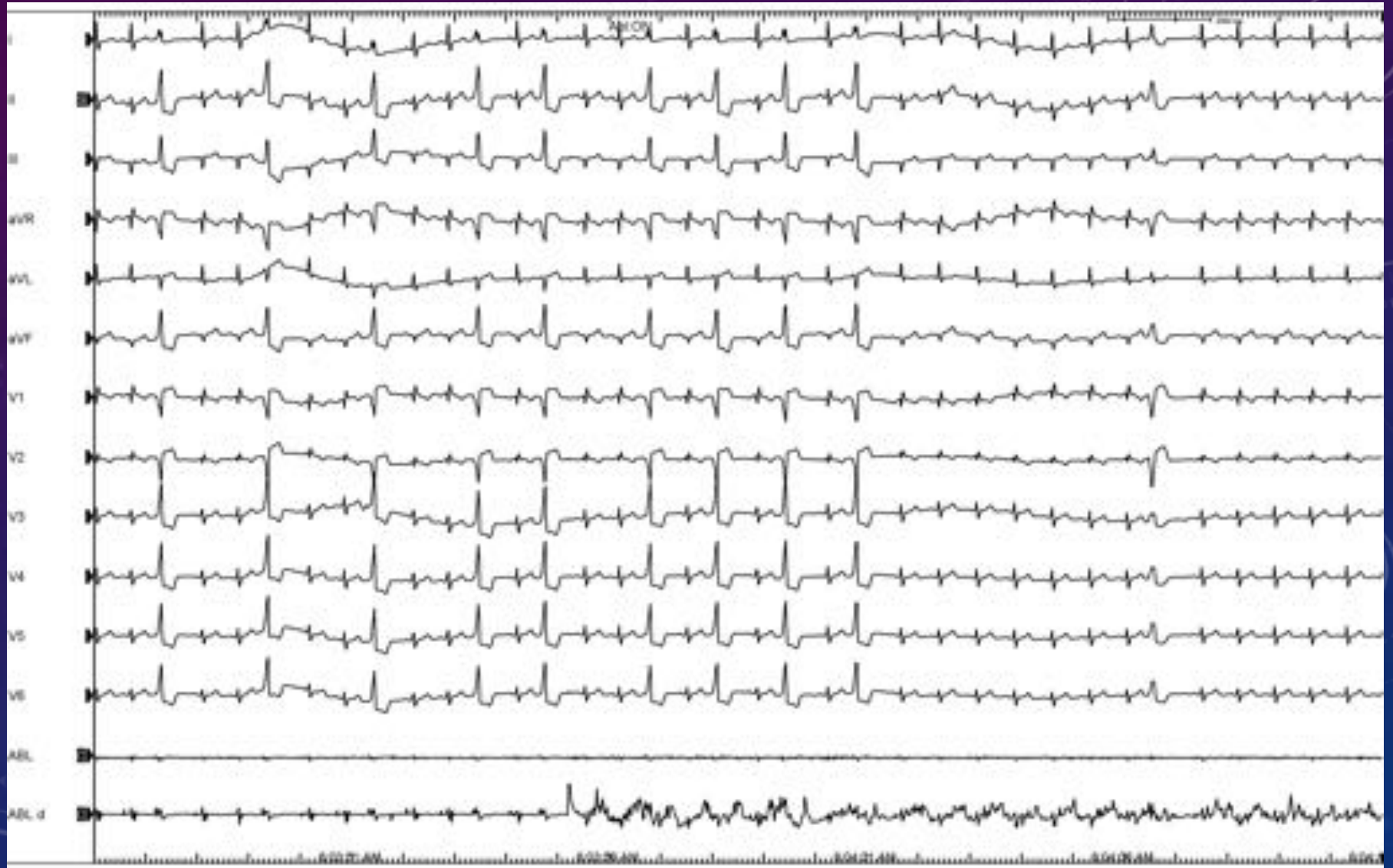
GETTING INTO RV TO EVALUATE CUSPS



INADVERTENT POSITIONING OF CATHETER IN LEFT MAIN



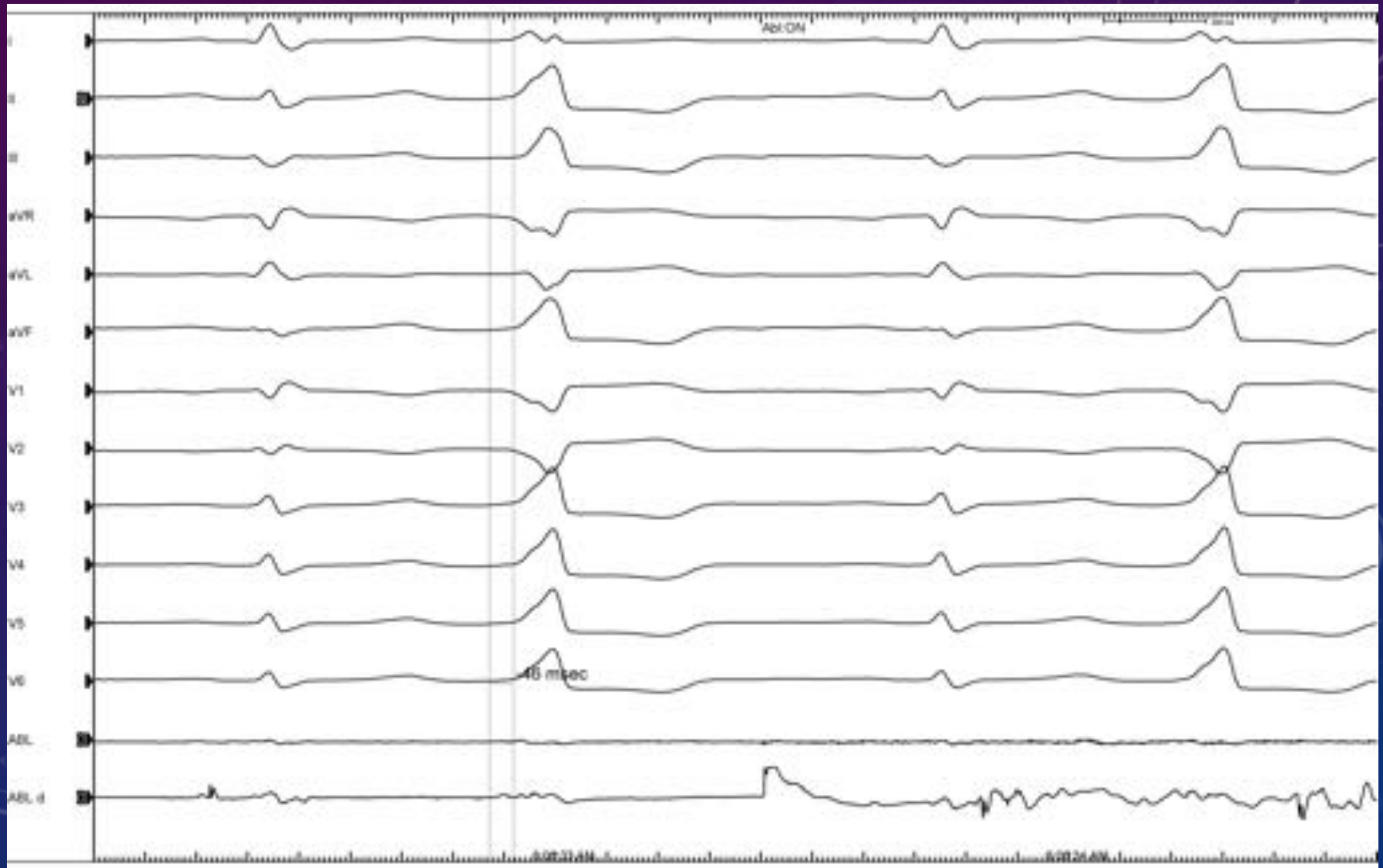
RF EFFECT



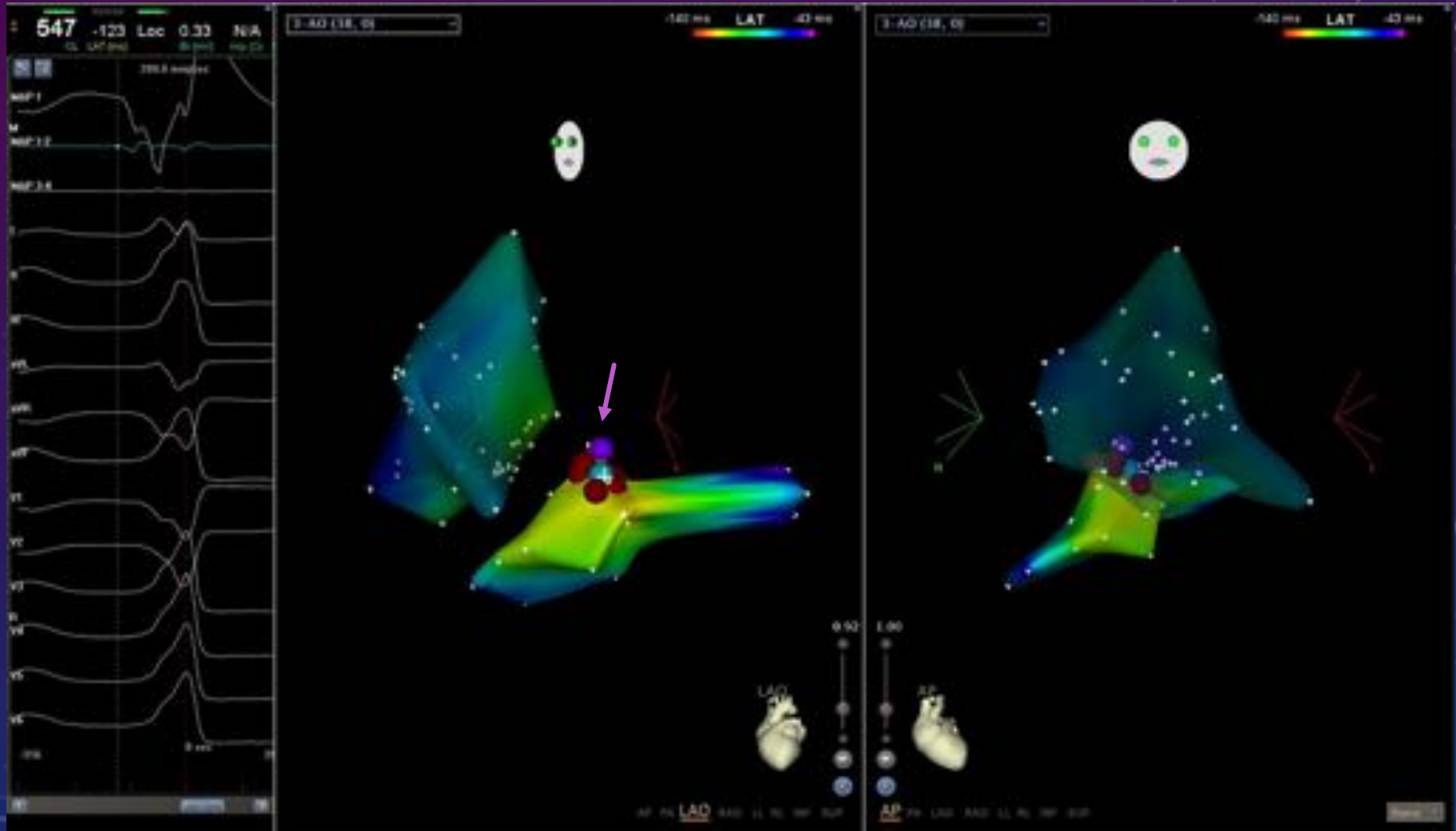
WAITING...



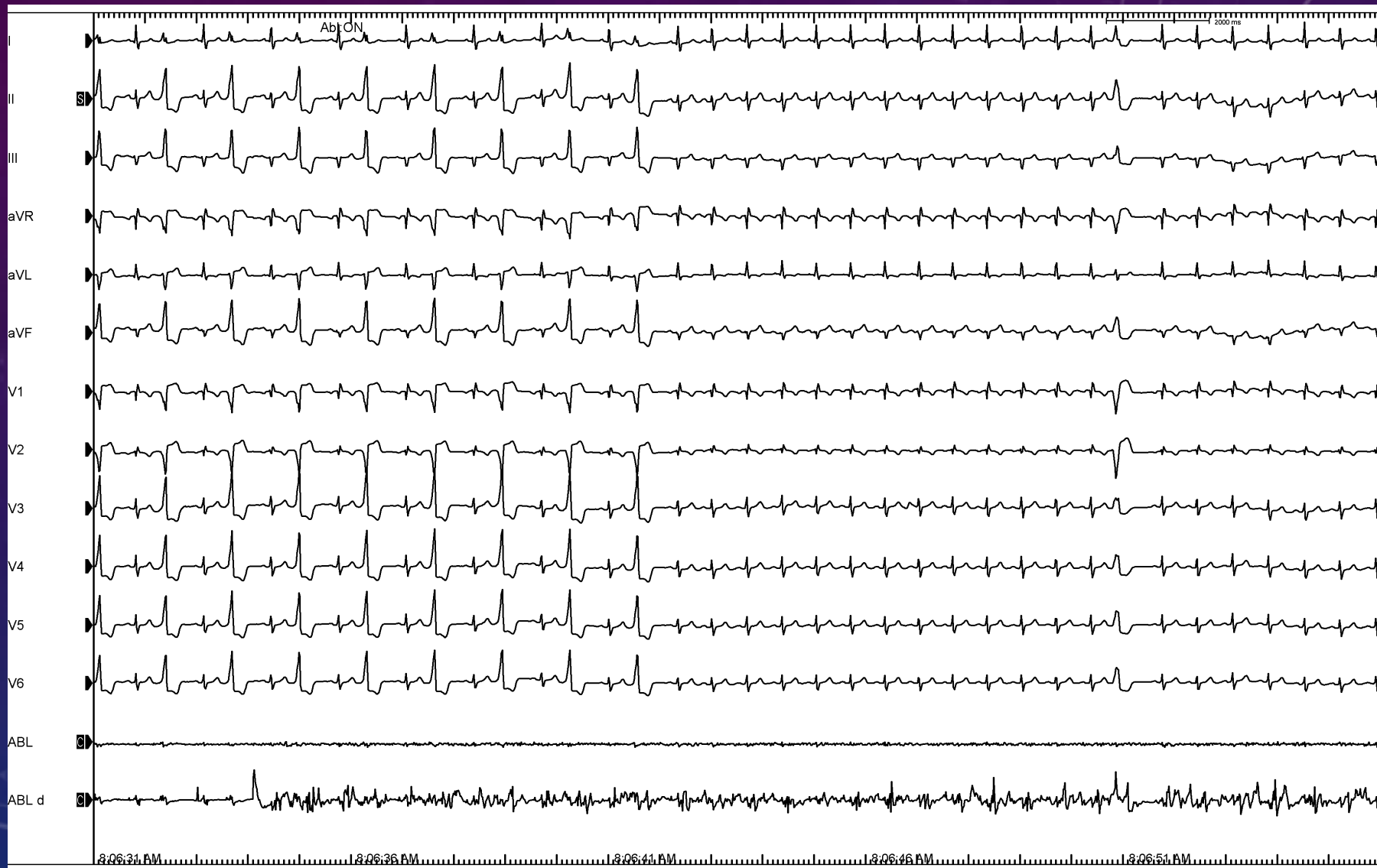
MAPPING IN THE LVOT



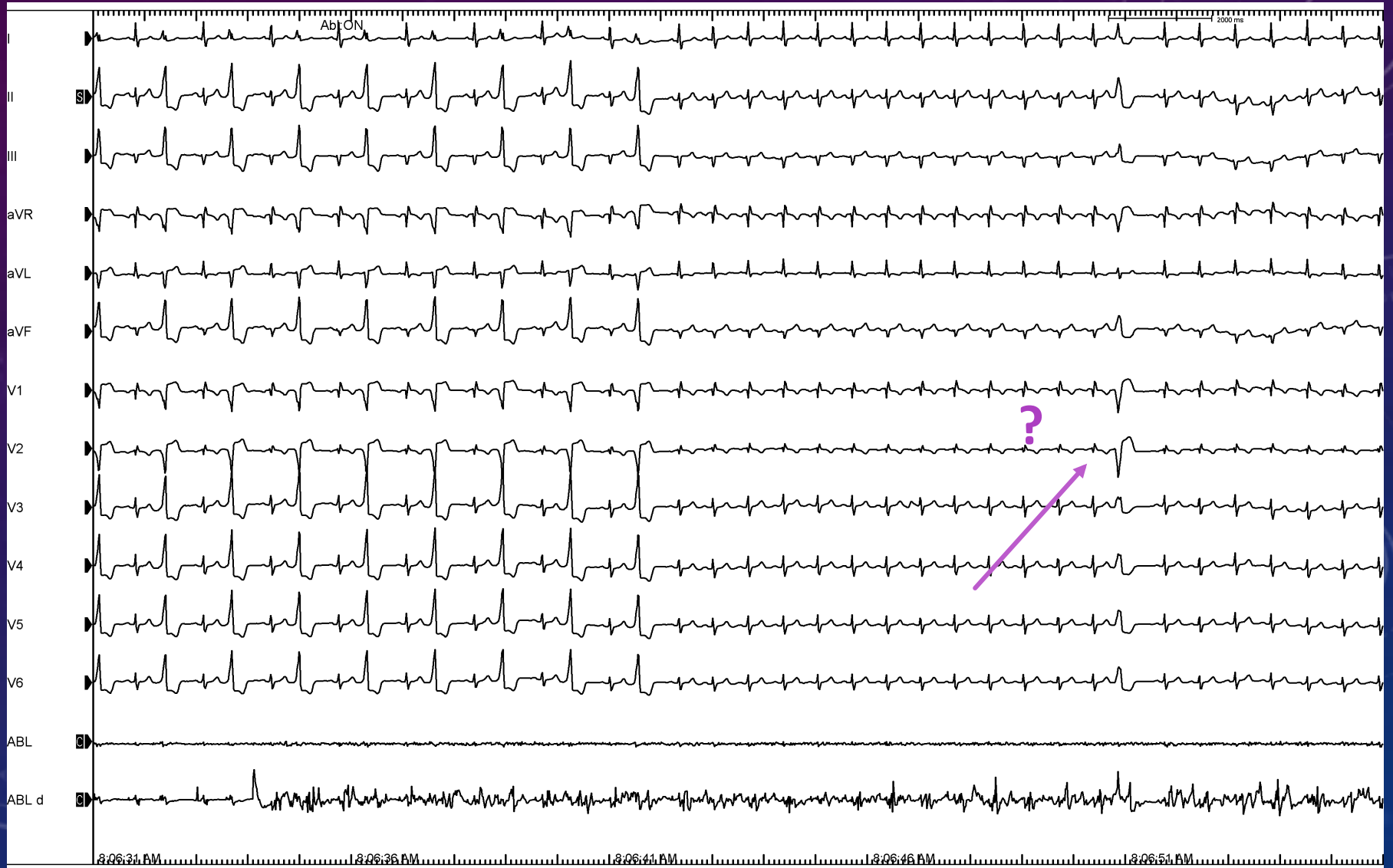
3D-MAPPING IN THE LVOT



RF EFFECT



BUT....



PVC # 2

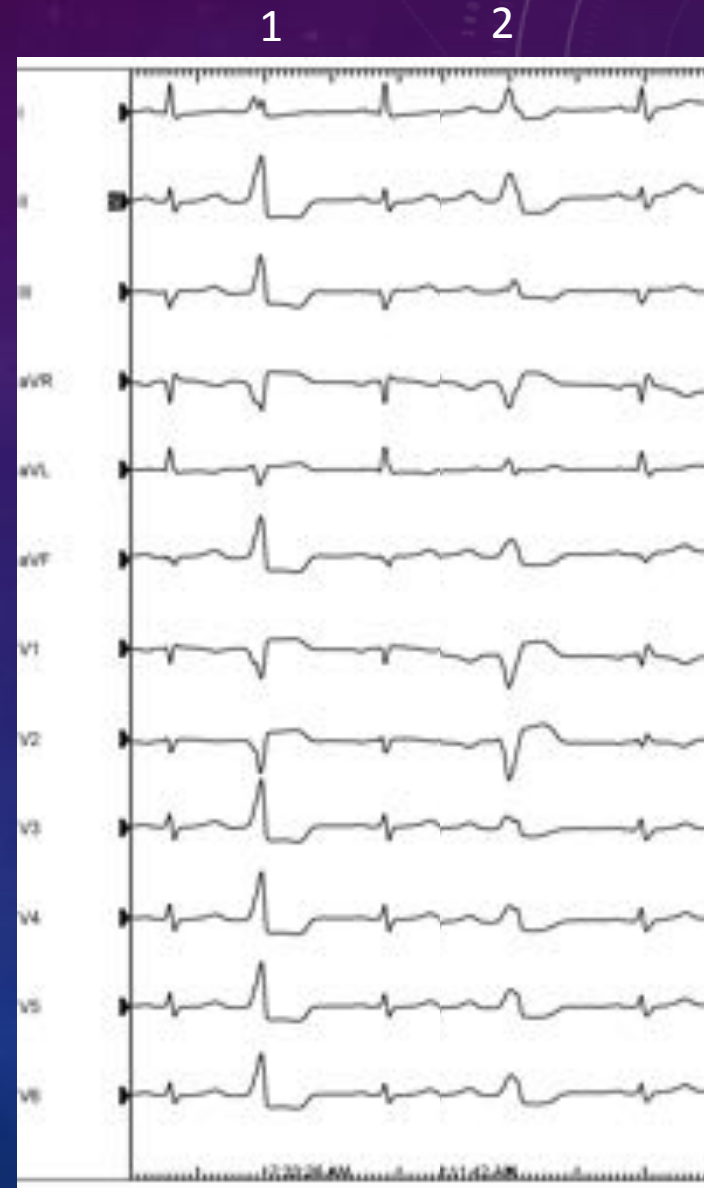


PVC # 2 VS PVC # 1

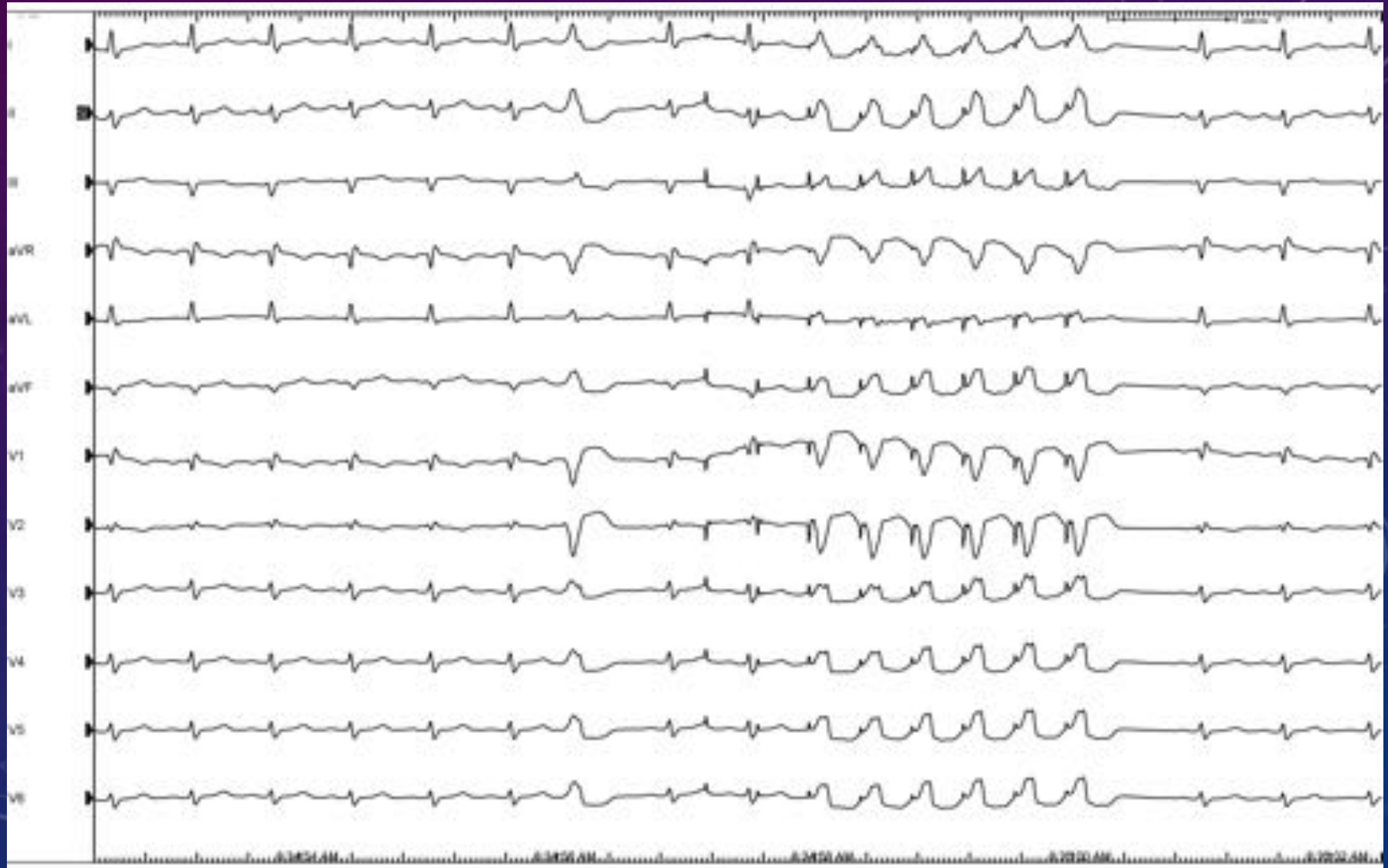
- Different morphology
- More sporadic



- What to do?



PACE-MAPPING IN THE RVOT

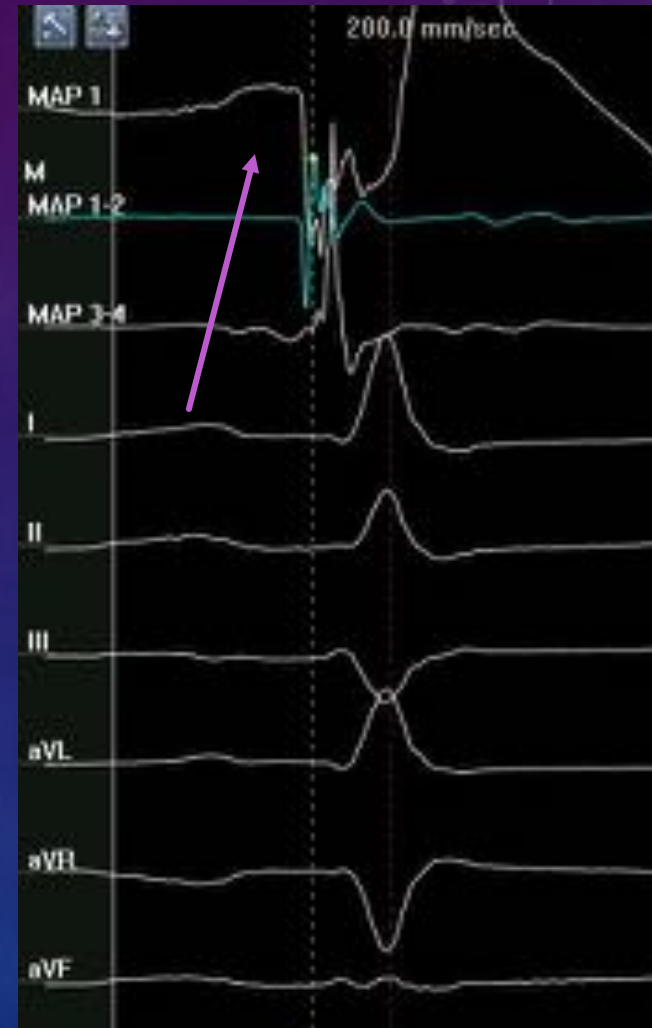


RE-MAPPING IN THE RVOT (ANTERIOR/FREE WALL)

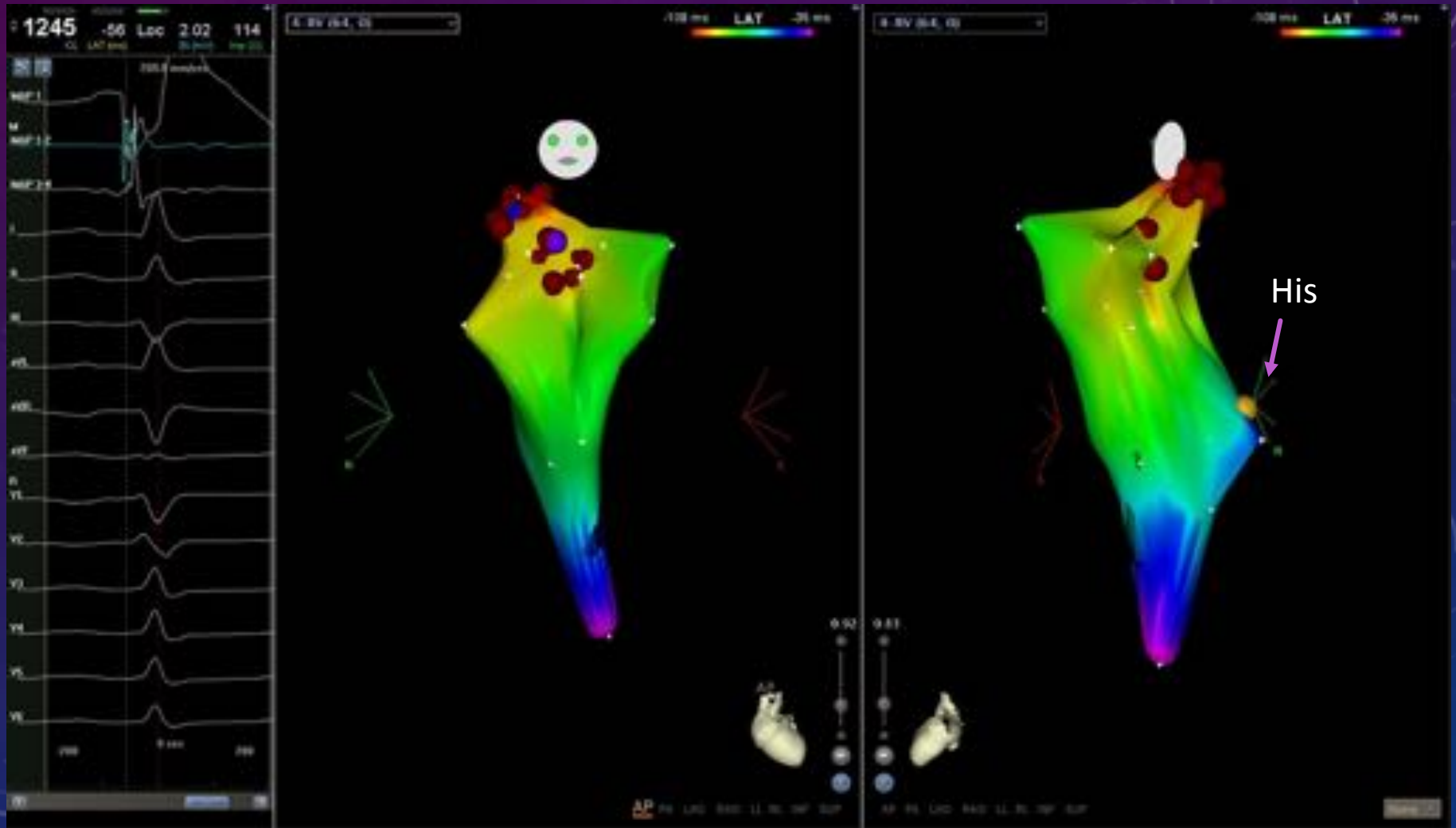


RE-MAPPING IN THE RVOT

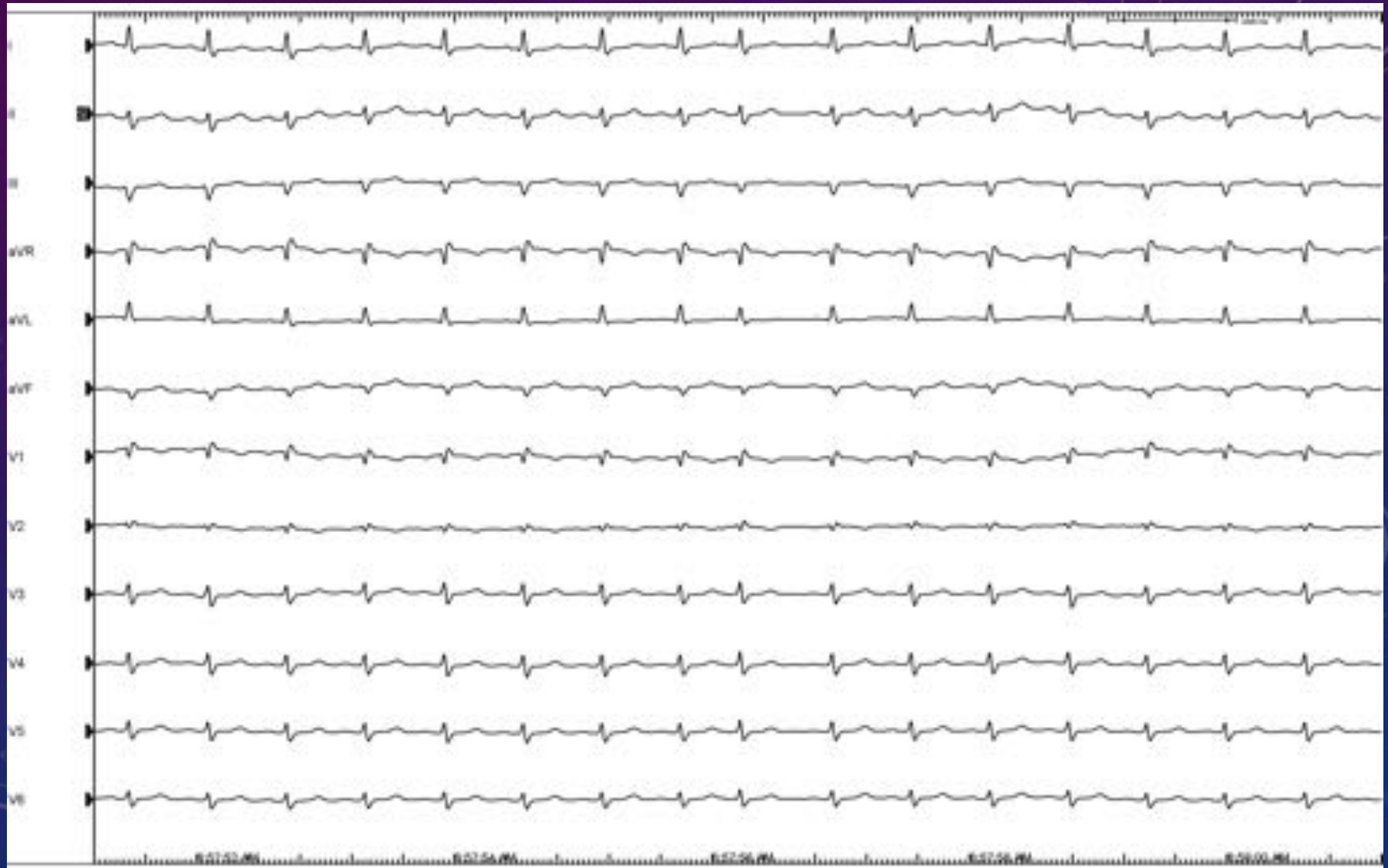
- Earliest V 43 msec pre-QRS
- Anterior RVOT
- Good pace-map
- QS on unipolar
 - ↓
- RF 40 W (irrigated tip)



RE-3D-MAPPING IN THE RVOT



AND IN THE END



AT FOLLOW-UP

- Asymptomatic
- ECG = NRS
- 48-hr Holter = sporadic (< 50 in 48 hrs) different morphologies
- ECHO-normal

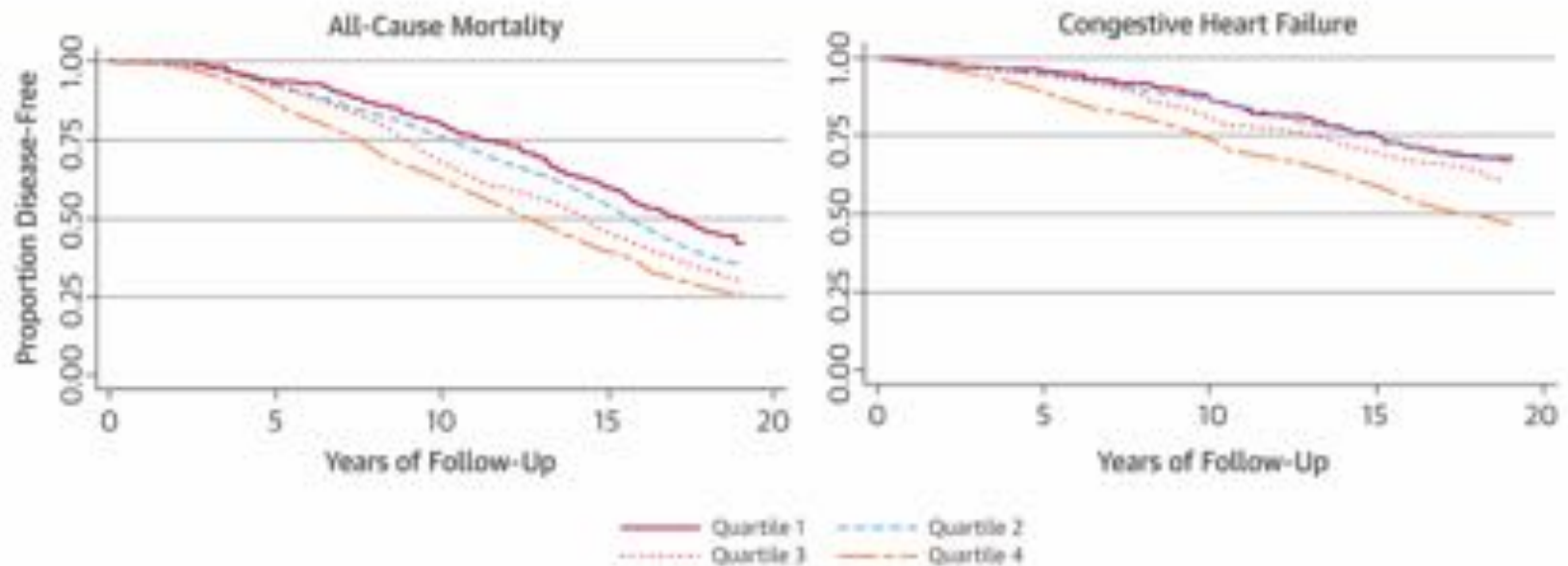


THANKS!!!

Ventricular Ectopy as a Predictor of Heart Failure and Death



FIGURE 1 Rates of CHF and All-Cause Mortality by PVC Quartiles



Unadjusted Kaplan-Meier estimates depicting incident congestive heart failure (CHF) and mortality, as stratified by the percent of premature ventricular contraction (PVC) count quartiles. Quartiles 1 through 4 represent PVC burdens of 0% to 0.002%, 0.002% to 0.011%, 0.011% to 0.123%, and 0.123% to 17.7%, respectively.

Radiofrequency Catheter Ablation for the Treatment of Idiopathic Premature Ventricular Contractions Originating from the Right Ventricular Outflow Tract: A Systematic Review and Meta-Analysis

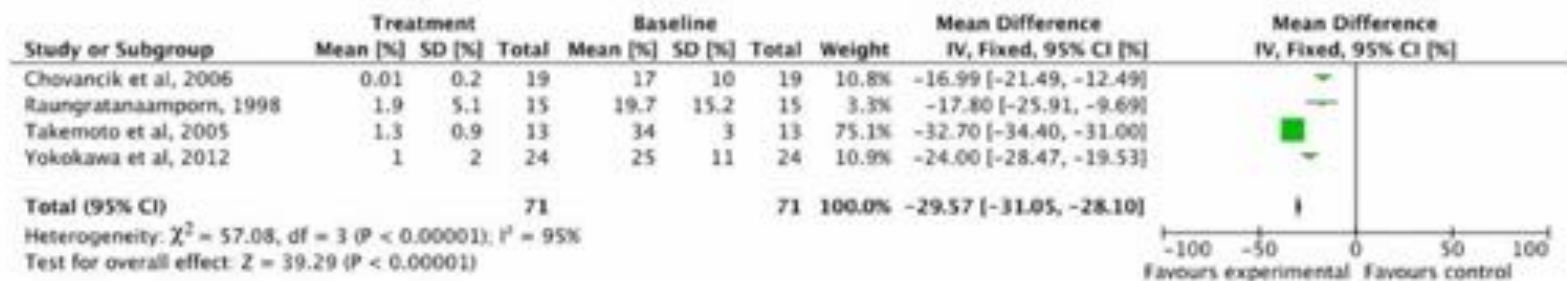


Figure 3. Percentage of premature ventricular contractions before versus after radiofrequency catheter ablation.

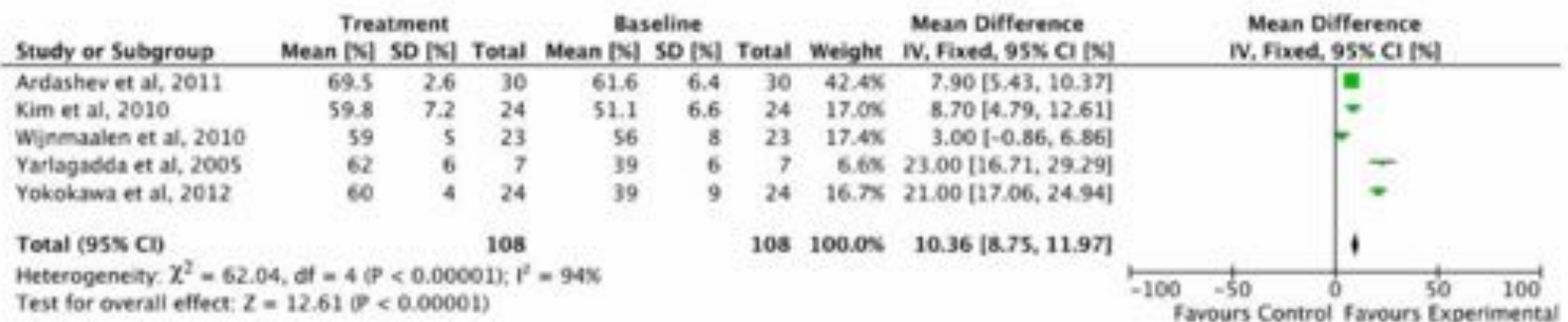


Figure 4. Left ventricular ejection fraction before versus after radiofrequency catheter ablation.