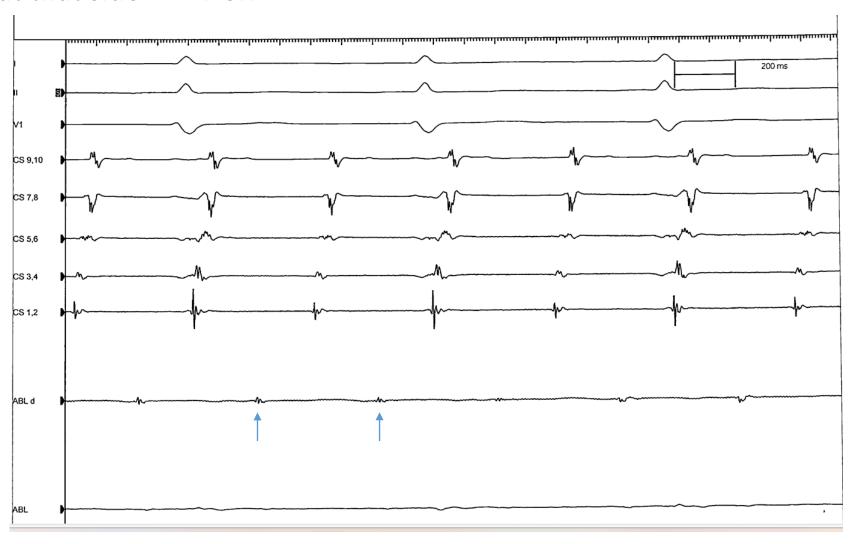
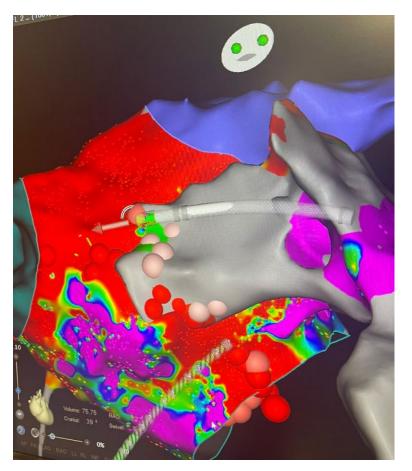
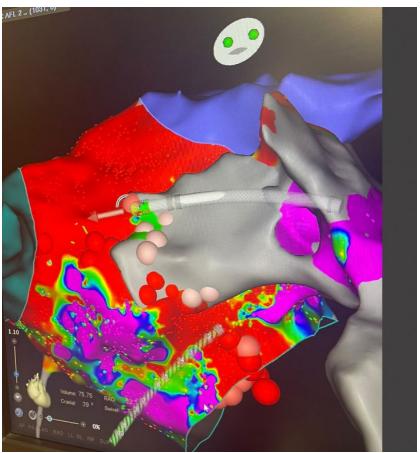
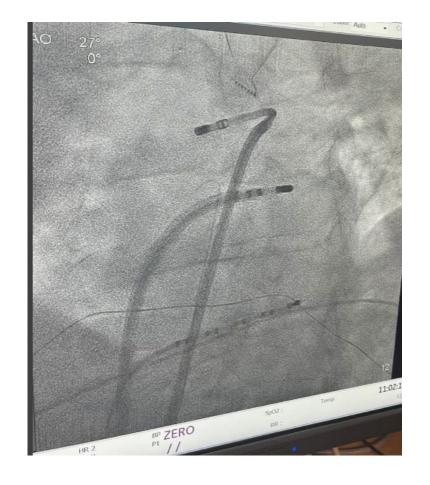
Coherent map of AFL showed that AFL isthmus was in ant LA scar but no endocardial signals:

Epicardial mapped showed a mid atrial flutter circuit signal on the opposite endo area. RF at that side >>> NSR



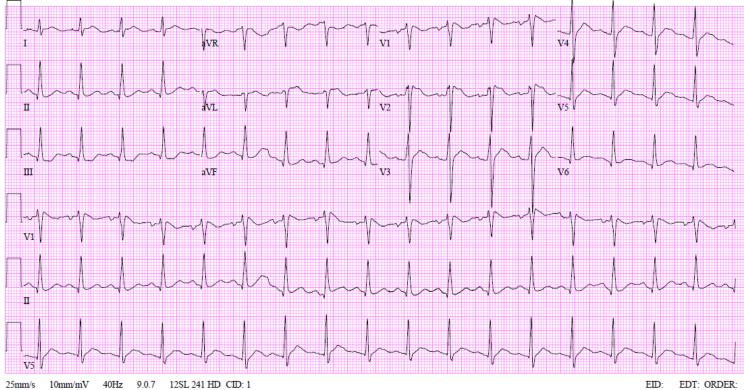




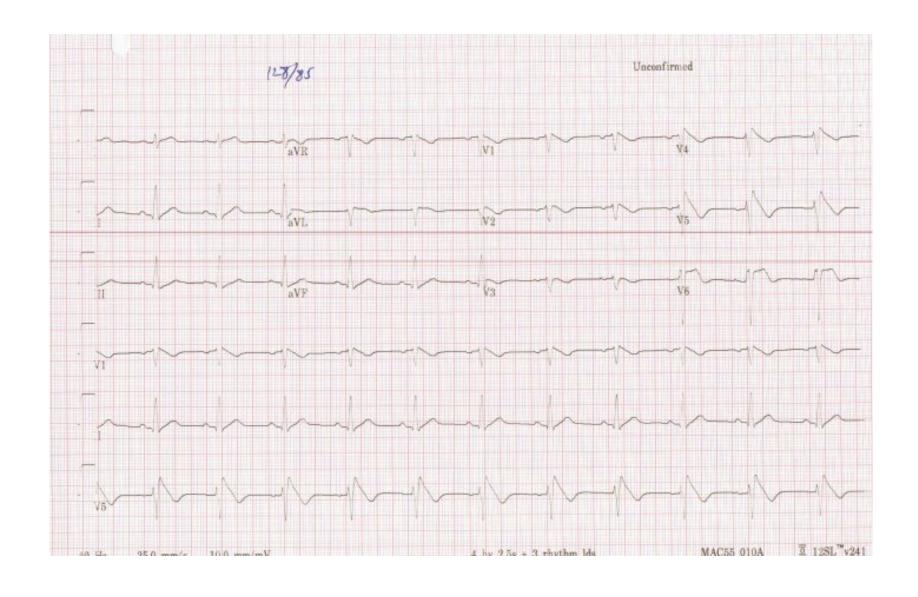


# OHSCA:

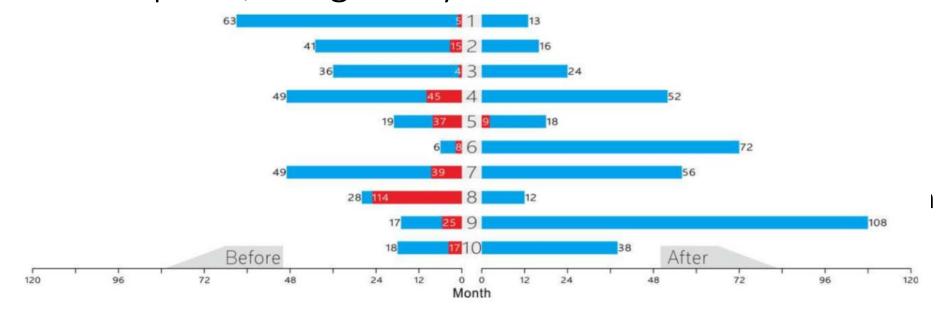
- 27 yo
- Presented with OHSCD while sitting after "heavy meal".
- NL ECHO, NL cMRI
- Baseline ECG:



High leads (V2= V1; V5= V2) Ajmaline ECG during hospitalization:



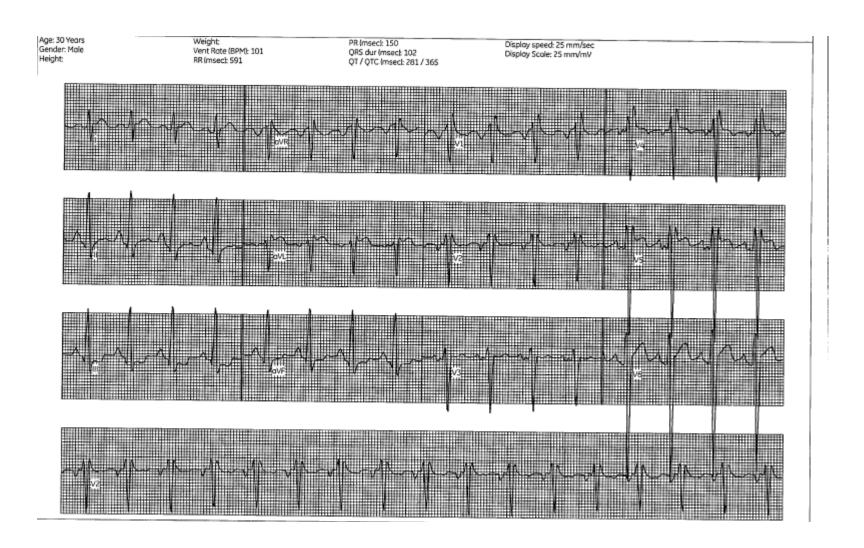
## **Quinidine** in pts w/ Brugada Syndrome

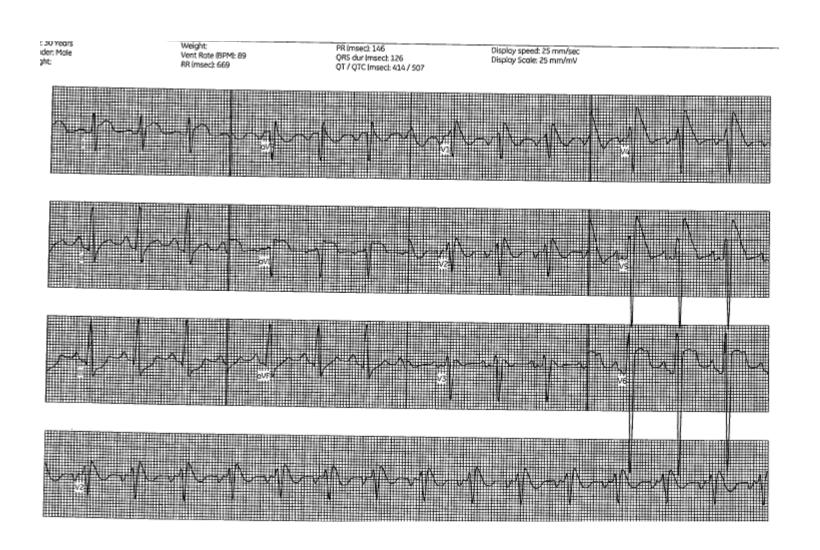


### However:

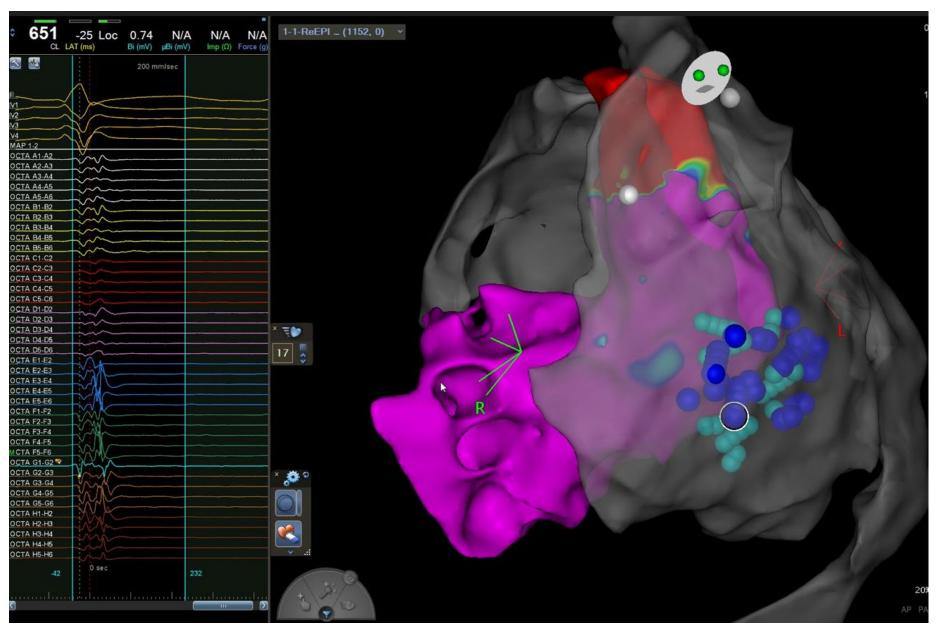
- GI side effects in up to 60% & d/c in 25%
- Difficult to obtain in many parts of the world

### Baseline ECG:





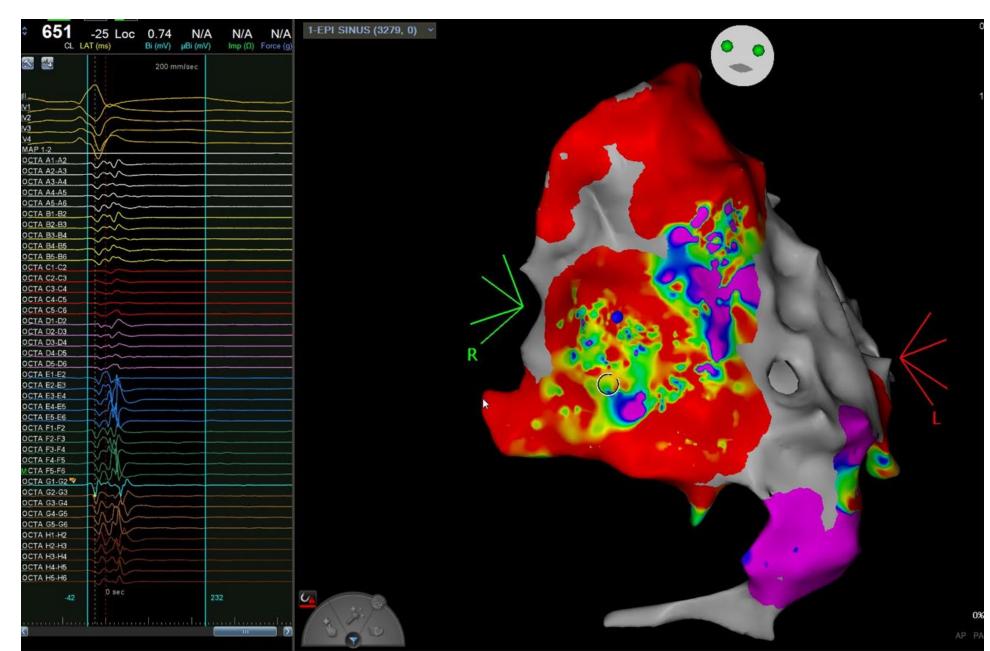
### Pre Ajmaline and pre ablation Endo RVOT map:



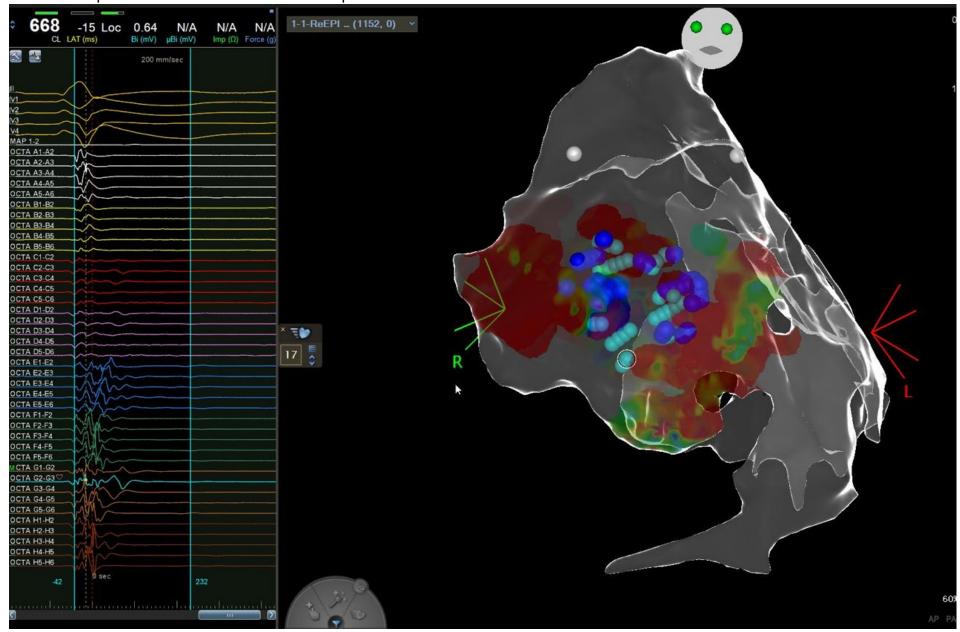
# Abnormal EGMs

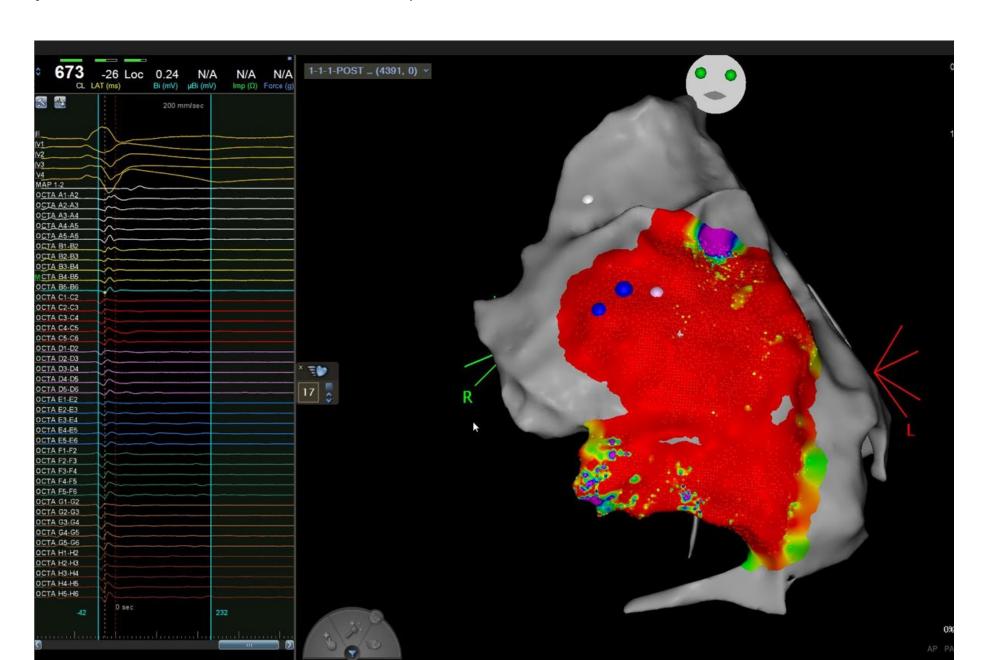
- 1. amplitude <1.5 mV
- 2. associated wide duration (>80 ms)
- 3. multiple (>3), or delayed components extending beyond the end of the QRS complex

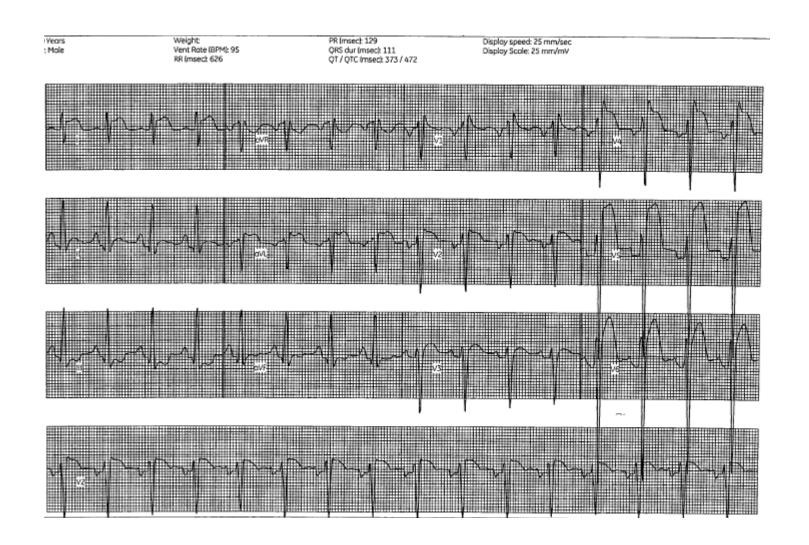
### Pre Ajmaline and pre ablation EPI RVOT map:

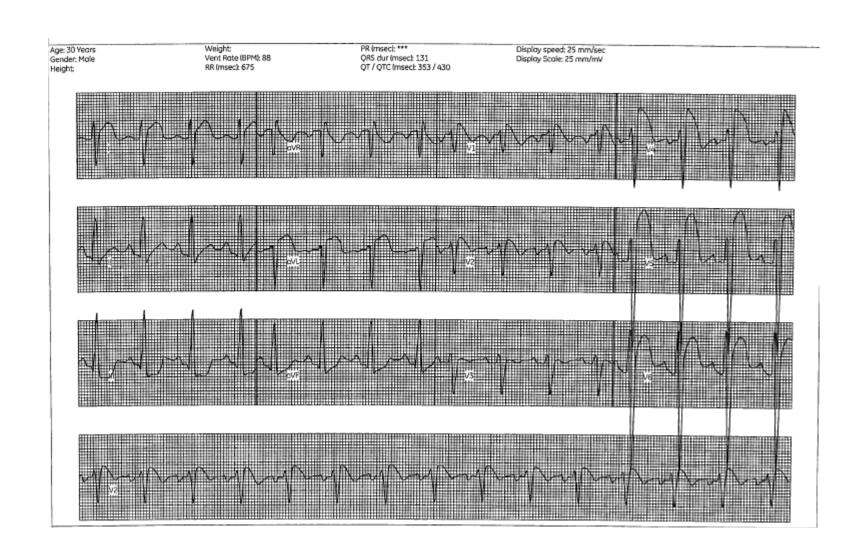


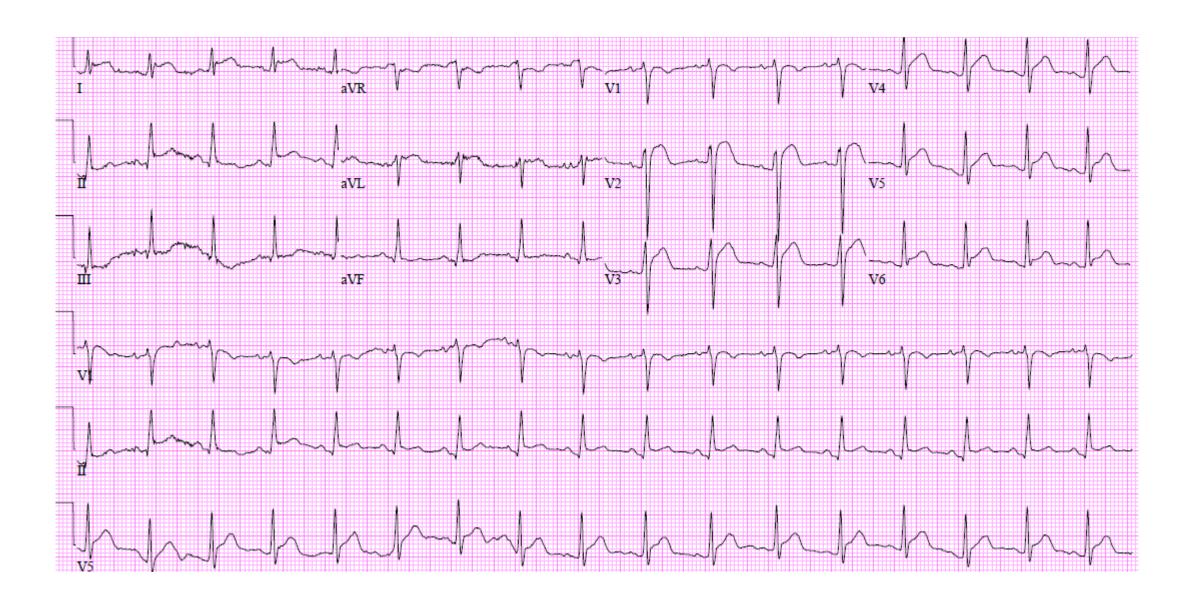
Post Ajmaline and pre ablation EPI RVOT map:



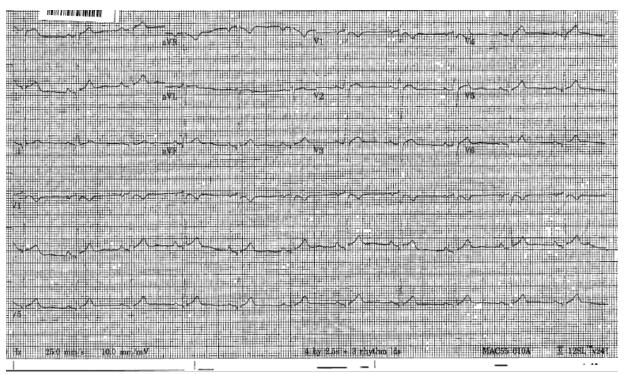


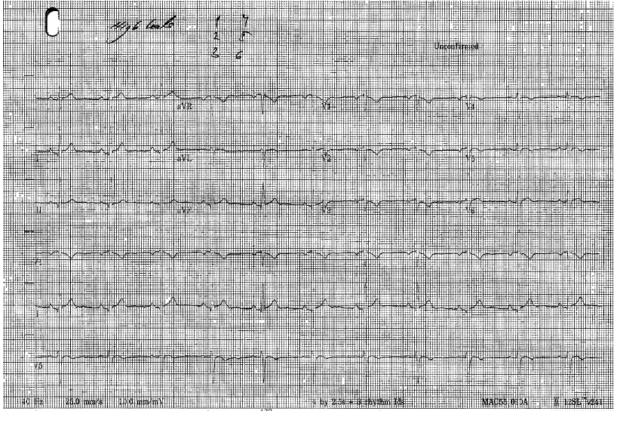




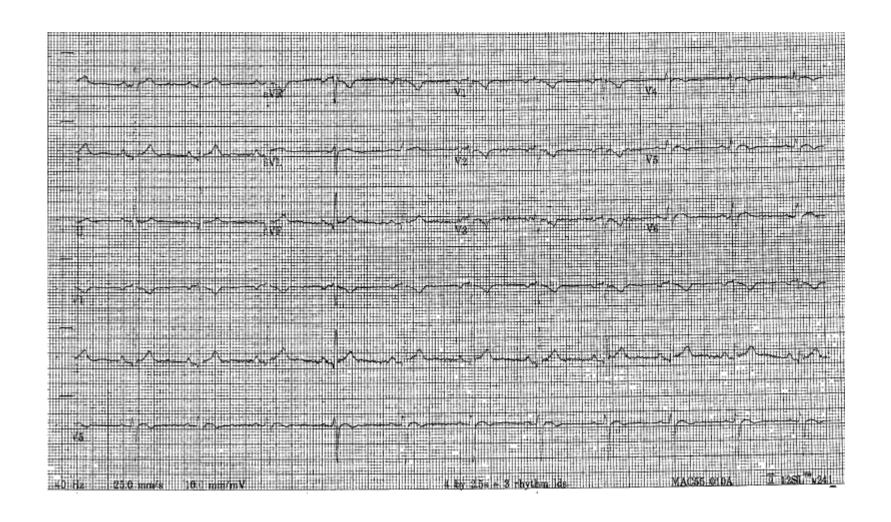


### Baseline and highleads ECG 1 month later:



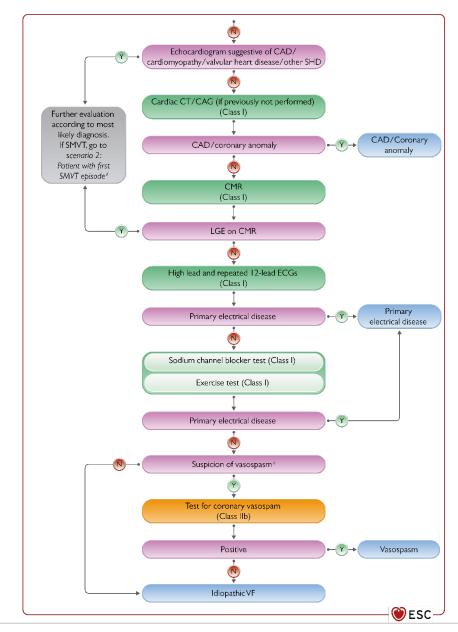


#### Ajmaline+ high leads ECG 1 month later:



# **DISCUSSION:**





# Electrical Substrate Elimination in 135 Consecutive Patients With Brugada Syndrome

Carlo Pappone, MD, PhD\*; Josep Brugada, MD, PhD\*; Gabriele Vicedomini, MD; Giuseppe Ciconte, MD; Francesco Manguso, MD, PhD; Massimo Saviano, MD; Raffaele Vitale, MD; Amarild Cuko, MD; Luigi Giannelli, MD; Zarko Calovic, MD; Manuel Conti, MD; Paolo Pozzi, Eng; Andrea Natalizia, PhD, Eng; Simonetta Crisà, Eng; Valeria Borrelli, PhD; Ramon Brugada, MD, PhD; Georgia Sarquella-Brugada, MD, PhD; Marco Guazzi, MD; Alessandro Frigiola, MD; Lorenzo Menicanti, MD; Vincenzo Santinelli, MD

Circulation A&E, 2017

#### **Procedural Details:**

Median procedure time: 169 min

Median RF time: 18 min

No complications

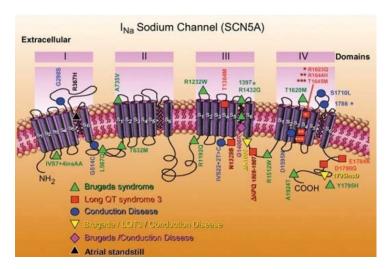
#### **Outcome:**

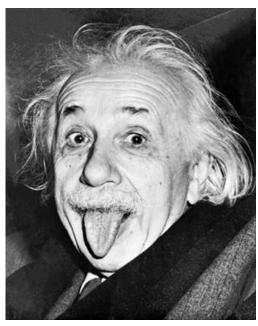
- ECG Normalization in 100%
- Noninducibility for VT/VF at end of Ablation in 100%
- Persistent ECG normalization during median 10 months of FU in 133/135 pts (99%) despite repeat Ajmaline testing
- Recurrent Arrhythmia in only 2/135 pts (1%)

## Summary

- The arrhythmogenic electrophysiological substrate in BrS resulting in the ECG phenotype and the vulnerability to VF seems located in the anterior RV epicardium.
- Epicardial substrate ablation targeting sites with prolonged fragmented signals identified after administration of Na-Channel-Blockers can normalize the resting ECG and minimize (or even prevent) further ventricular arrhythmias.
- A prospective RCT comparing Ablation vs. Standard Rx after 1st ICD shock is under way (BRAVE study).
- For now, ablation is a welcome therapeutic option in selected symptomatic BrS patients.

# Catheter Ablation in pts w/ Brugada Syndrome







«A question that sometimes drives me hazy: am I or are the others crazy?»

- Albert Einstein -