

# Atrial Flutter and Bradycarrhythmias

Pace or Ablate?

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# Two Cases

- Common features
  - Presentation with symptomatic pauses
  - Context of Atrial flutter
- Dilemma
  - Pace by intent or start with ablation

# Case 1

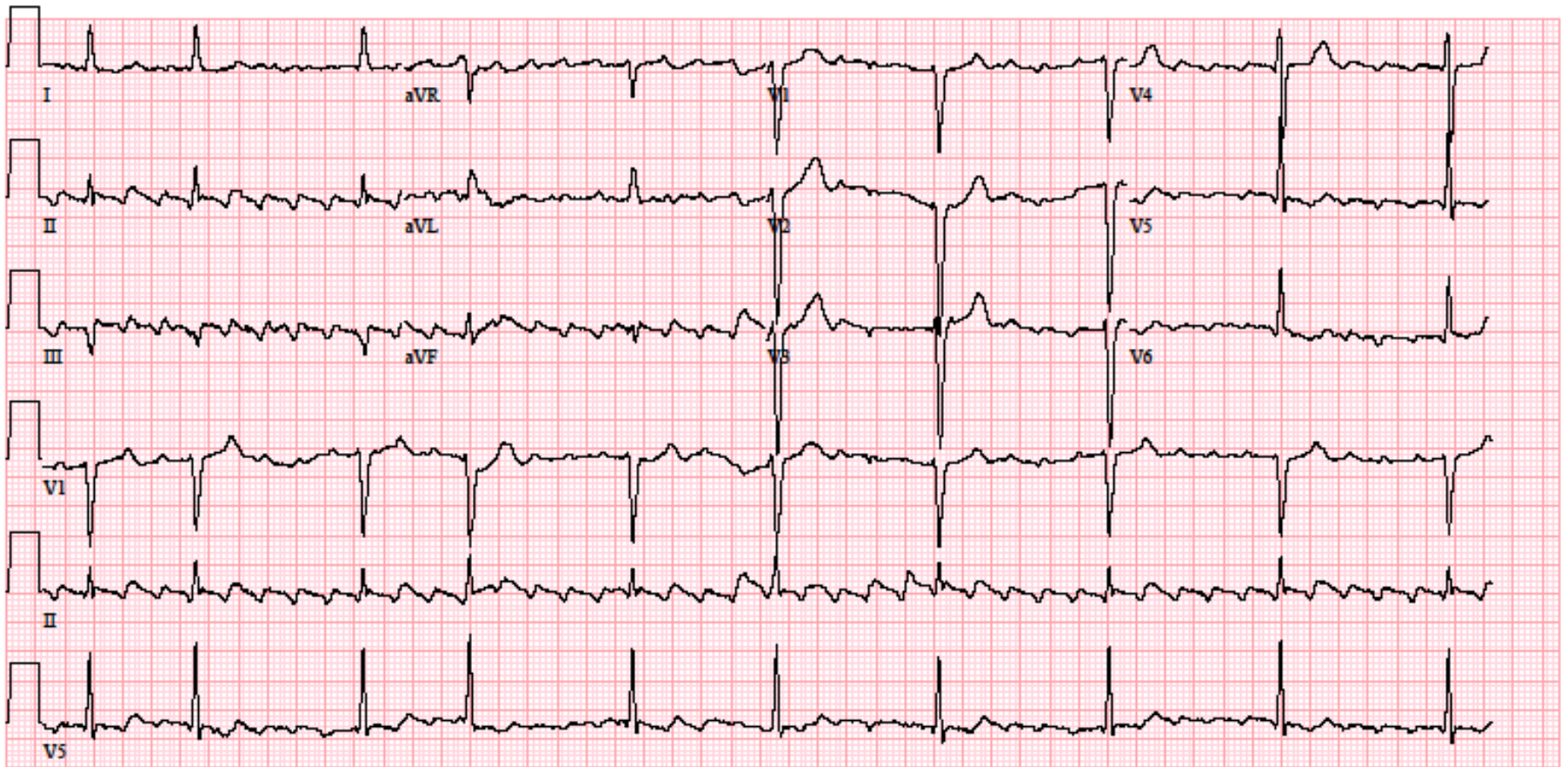
- 68 year old man
- Carbomedics AVR for acquired AS 5 yrs previous
- 3 month history of SOB, dizzy spells and 2 syncopal episodes
- Echo
  - Moderate AR with paraprosthetic leak, LVEDD 6.2 cm with preserved LV function, Biatrial dilatation (LA 4.8)
- 24 hour Holter...

# Holter recordings



Referred by: AR

Newly Acquired



# Management?

- A DCCV
- B DDDR
- C VVIR
- D EPS and CTI ablation
- E Further Investigation to decide
- F Amiodarone and reassurance

# VVIR Implanted

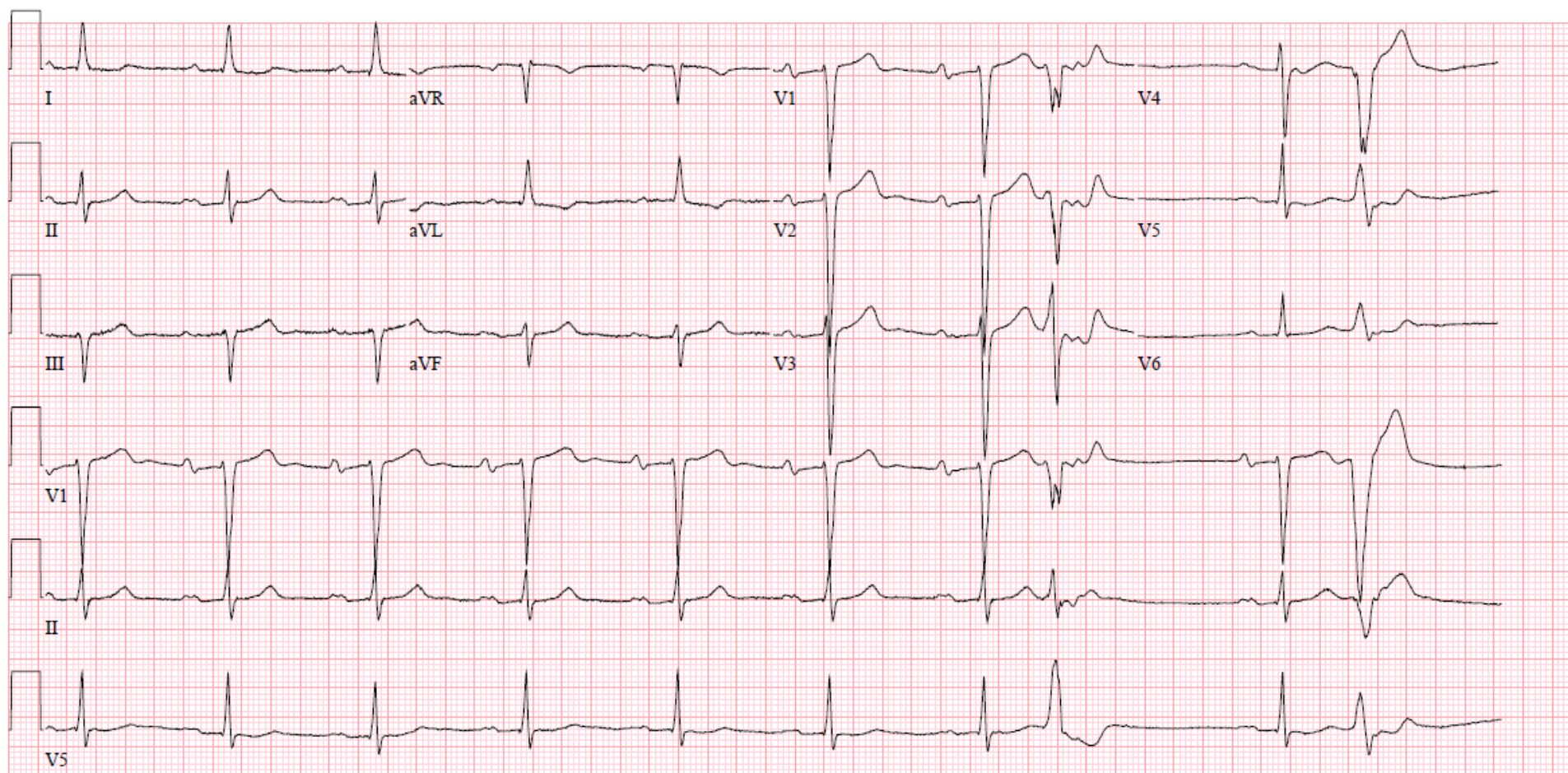
- Patient did well initially
- Presented with red, tender site at 4 weeks
- Device explanted without complication

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# Post Ablation

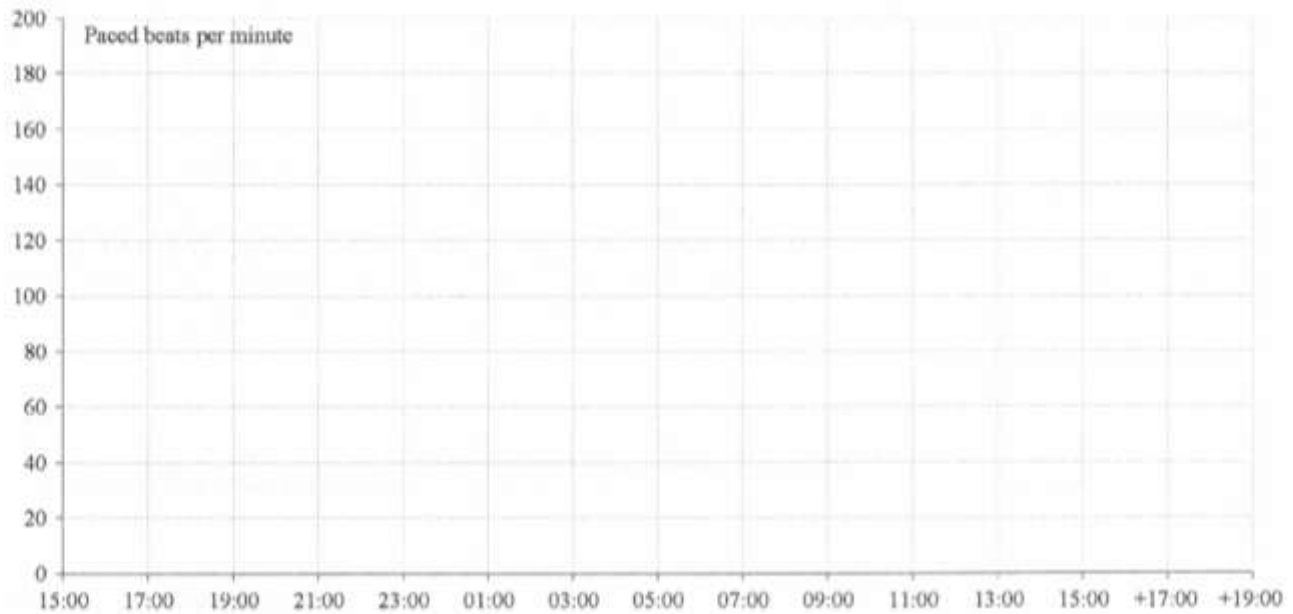
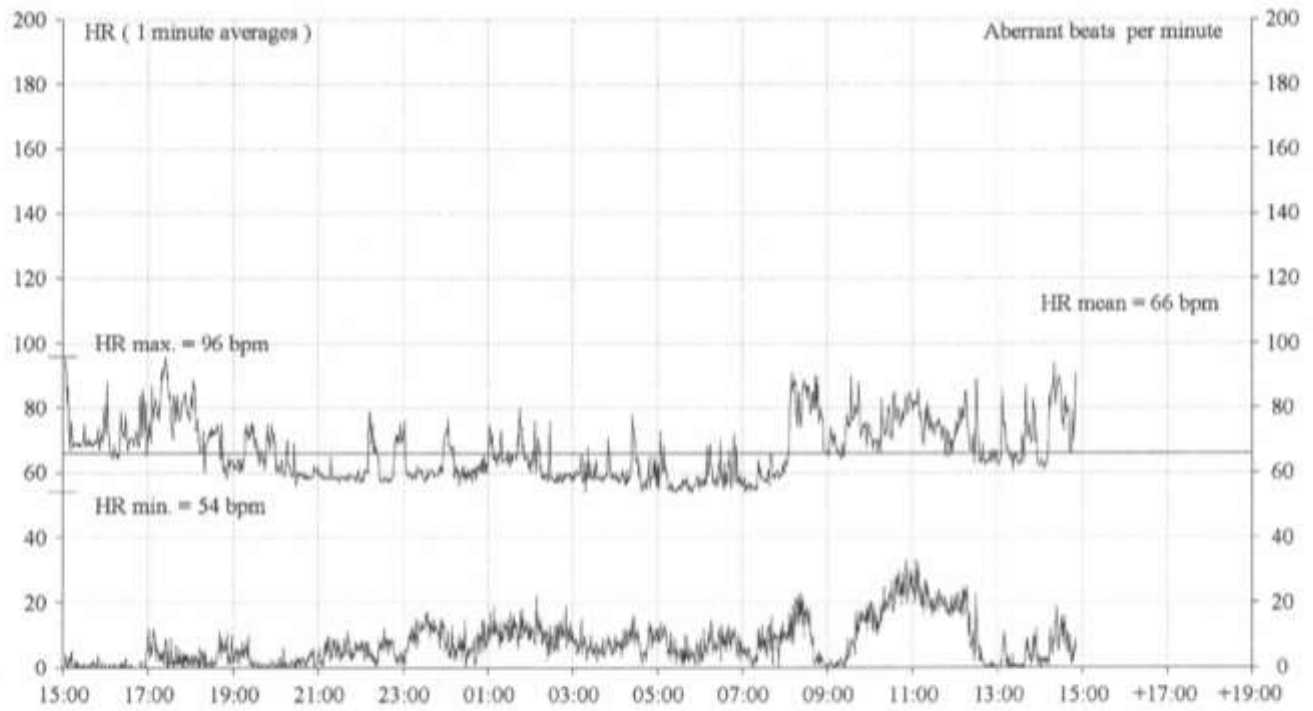


# Follow up

- Now 18 months post ablation
- No recurrent symptoms
- ETT pre discharge
- Holter 3 months post ablation

### Exercise Test Summary

| Phase Name | Stage Name | Time in Stage | Speed (mph) | Grade (%) | HR (bpm) | BP (mmHg) |
|------------|------------|---------------|-------------|-----------|----------|-----------|
| PRETEST    | WARM-UP    | 00:09         | 1.0         | 0.0       | 96       |           |
| Exercise   | STAGE 1    | 00:01         | 1.1         | 0.1       | 100      |           |
|            |            | 02:46         | 1.7         | 10.0      | 142      |           |
| Recovery   |            | 01:00         | 0.0         | 0.0       | 136      |           |
|            |            | 13:26         | 0.0         | 0.0       |          | 180/80    |

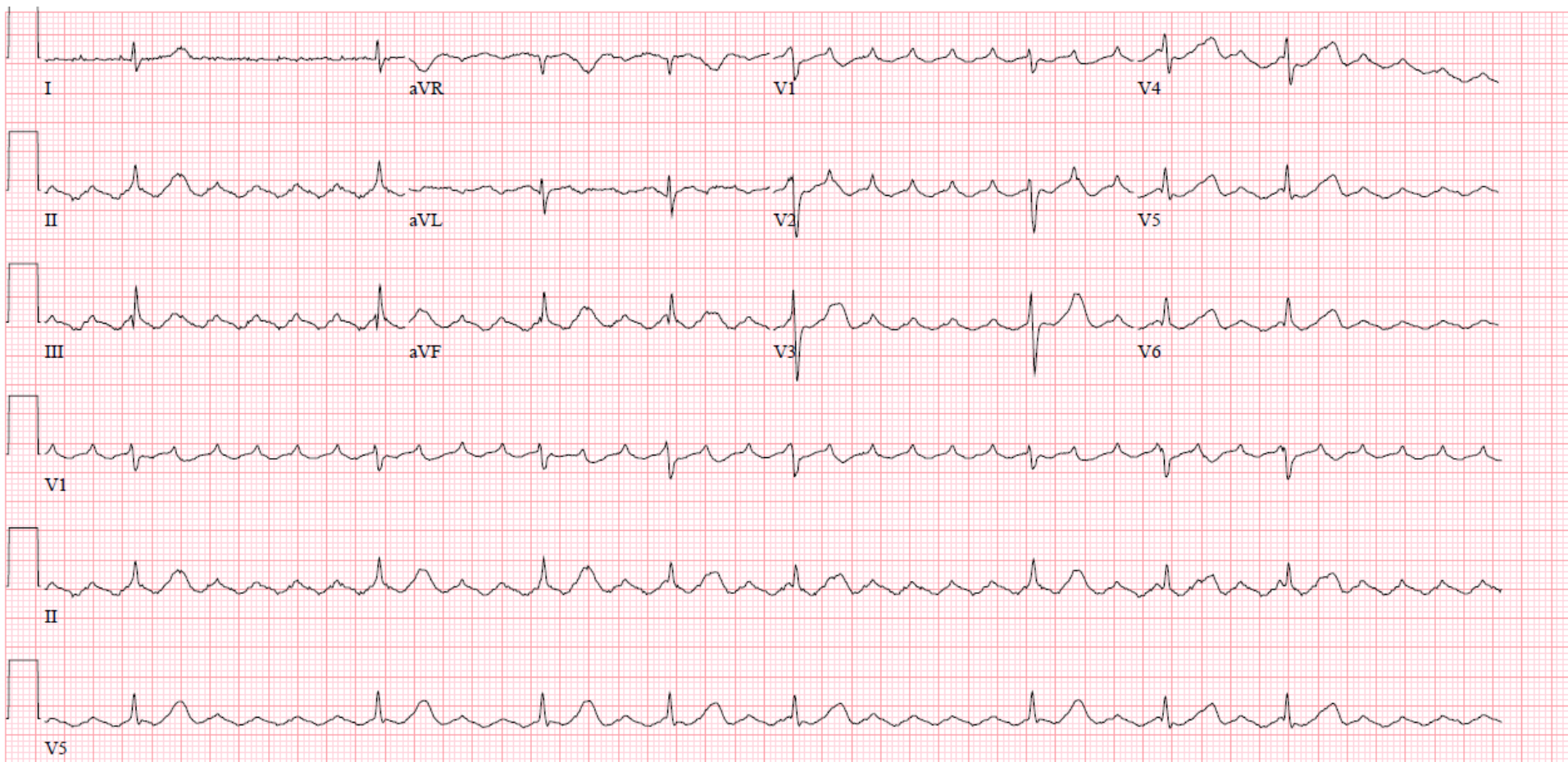


# Case 2

- 48 year old lady
- Presented with one syncopal and multiple presyncopal episodes
- Well between episodes
- Husband has PPM for permanent AF with bradycardia

# Investigations

- Echo
  - Structurally normal heart
- Holter
  - Flutter throughout, rates 42-130 bpm, longest pause 2.5 seconds (nocturnal)
- 12 lead ECG

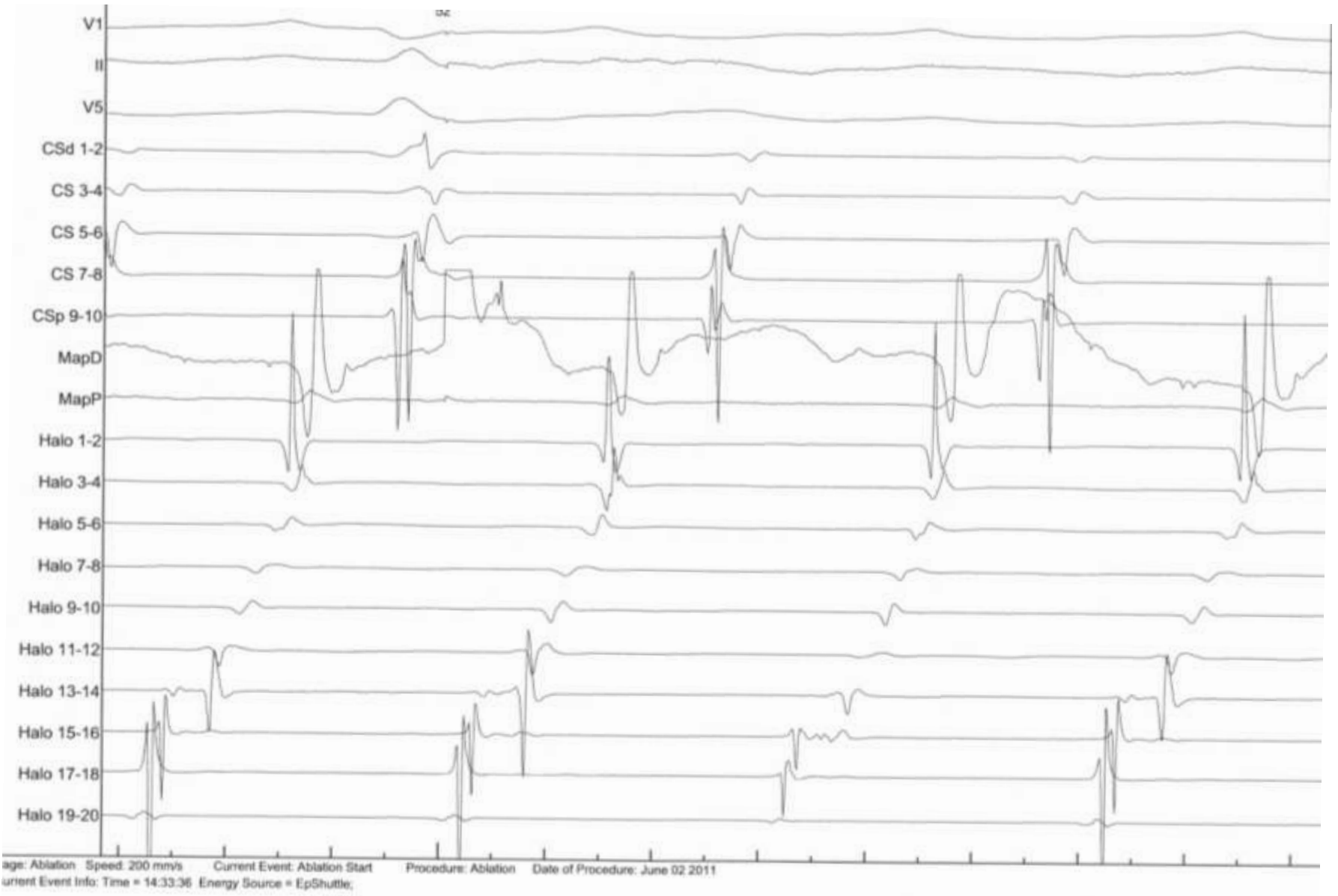


# Management?

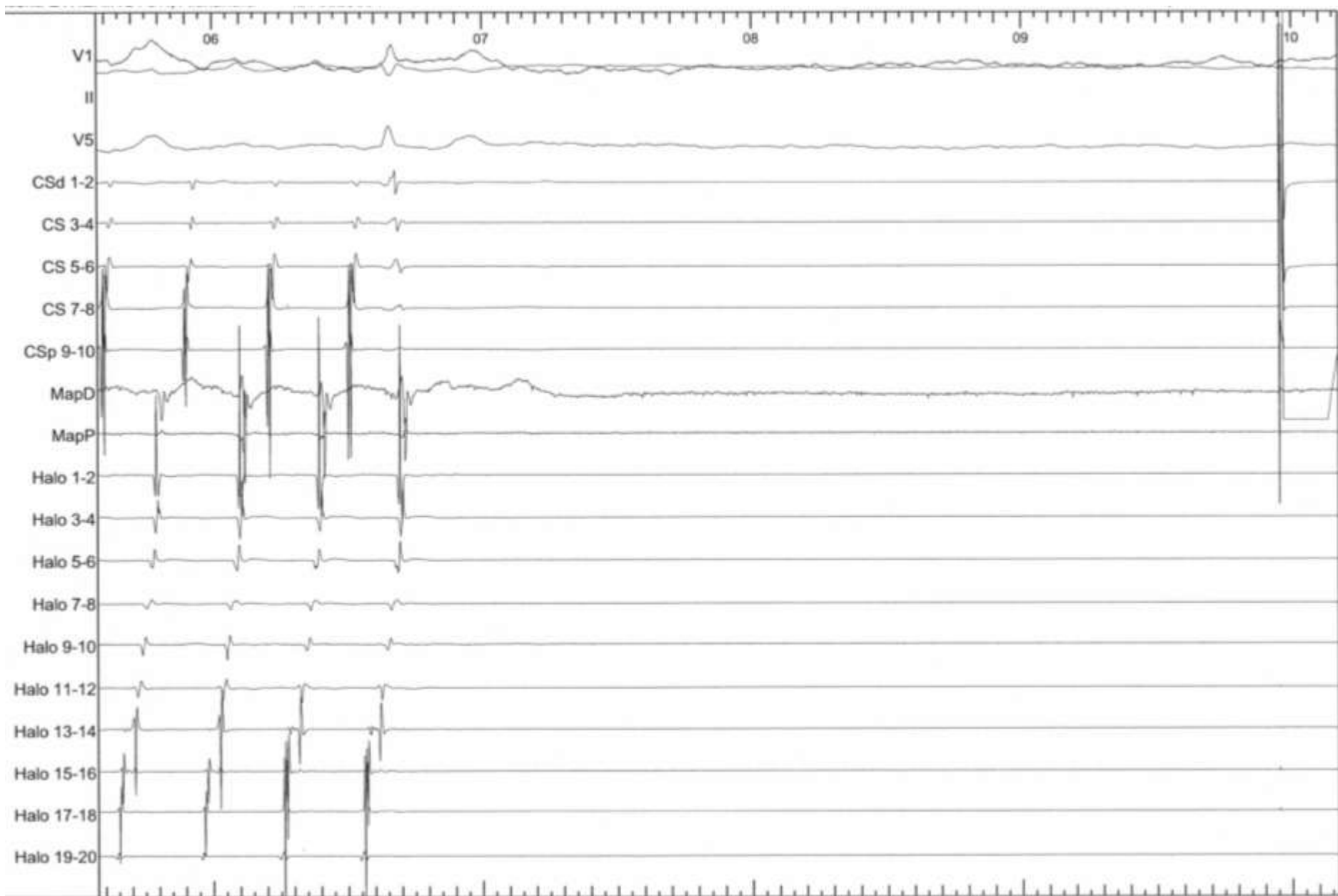
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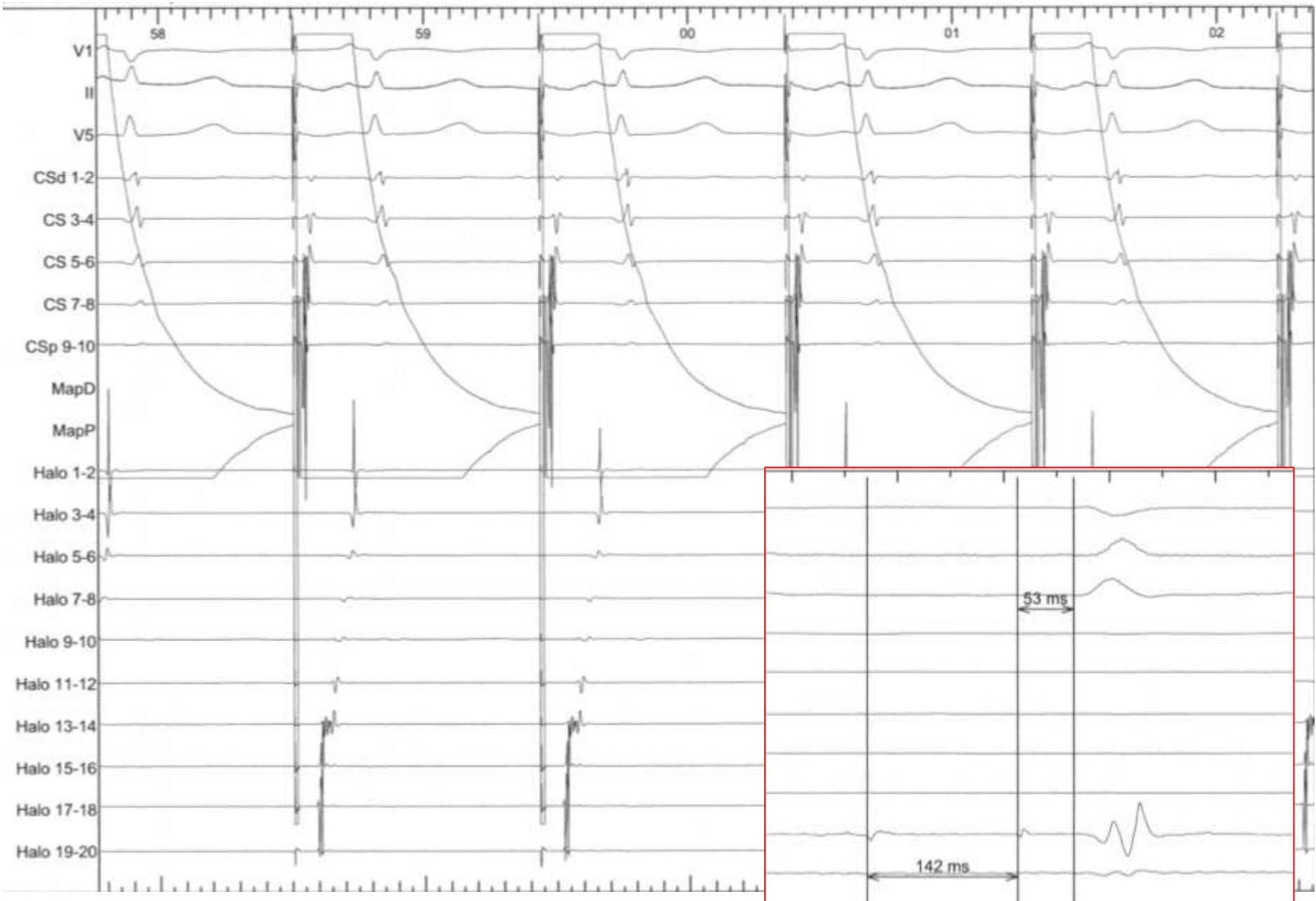
# EPS and Ablation

- Typical Flutter confirmed
- Cavo Tricuspid Isthmus ablation
- Termination of flutter with prolonged sinus pause
- On resumption of atrial rate prolonged PR interval



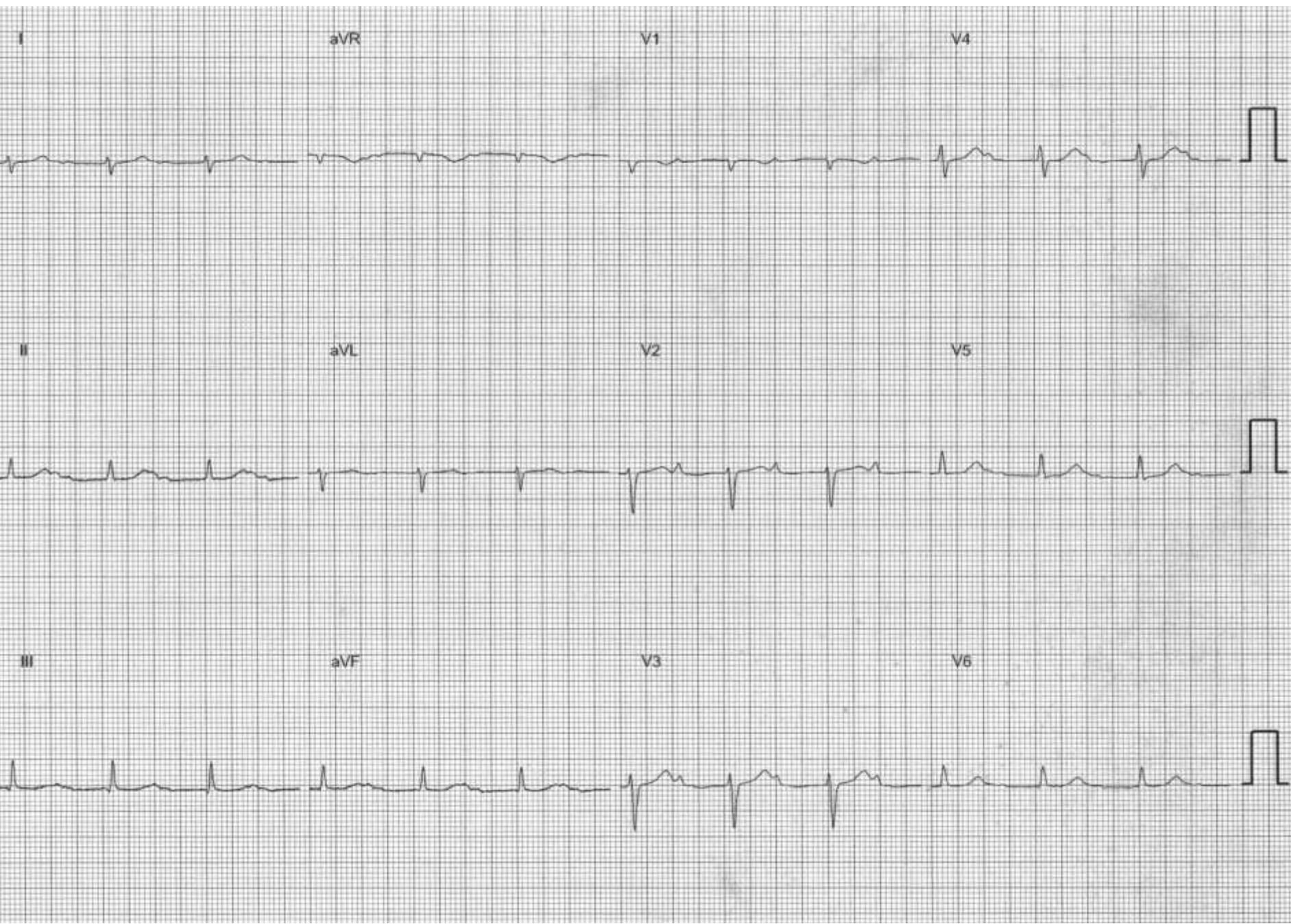
Age: Ablation Speed: 200 mm/s Current Event: Ablation Start Procedure: Ablation Date of Procedure: June 02 2011  
Current Event Info: Time = 14:33:36 Energy Source = EpShuttle





# What now...

- A Straight to DDDR
- B Back up VVI
- C TPW overnight and decide
- D EP manoeuvres to decide
- E Monitor back on ward



# Monitored on Ward

- No pauses for 10 hours post ablation
- Persistent Long PR
- Allowed home
- Readmitted next day in CHB following syncopal episode

# Evidence and Guidelines

- Evidence
  - ????????
- Atrial fibrillation guidelines
  - Do not address flutter
- Supraventricular tachycardia guidelines
  - Address flutter but not bradycardia in flutter
- Pacing guidelines
  - Address SND, 1<sup>st</sup> degree and high grade AV block but not in the context of flutter
  - Address 1<sup>st</sup> degree heart block as a complication of ablation but not bystander