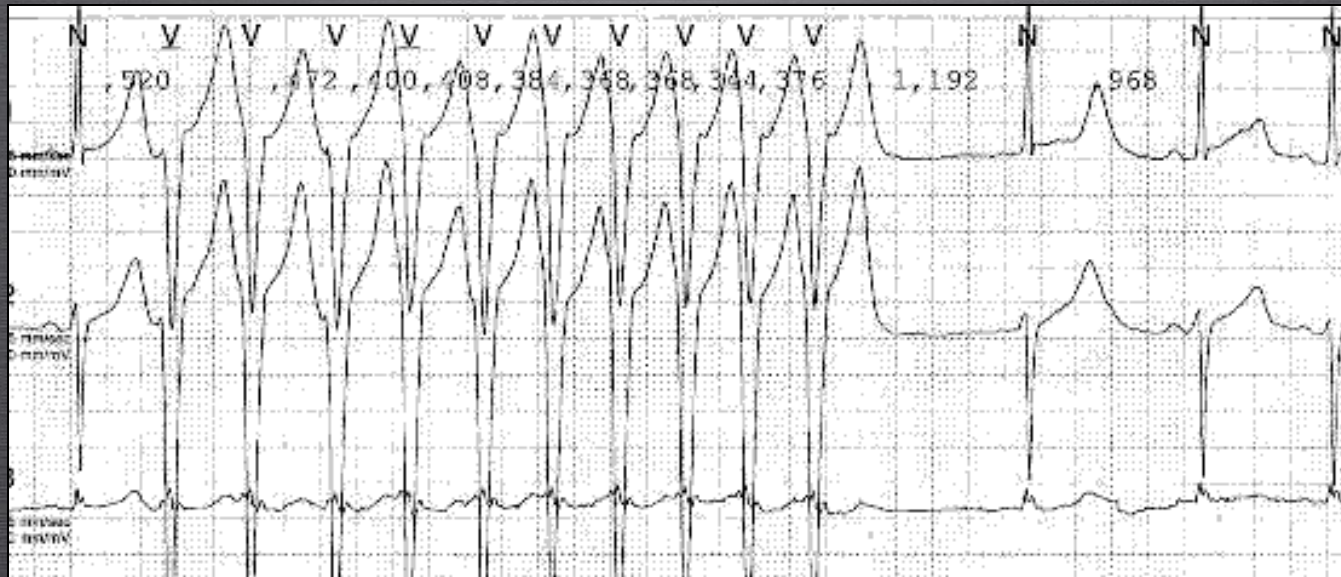
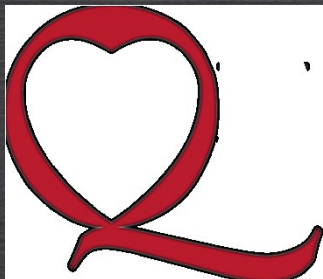


# Reading (Un)usual Holters

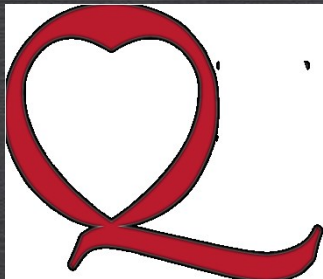


Adrian Branchuk MD FACC FRCPC FCCS  
Professor of Medicine  
Queen's University  
International Winter Arrhythmia School  
February 2017



# Conflict of interest

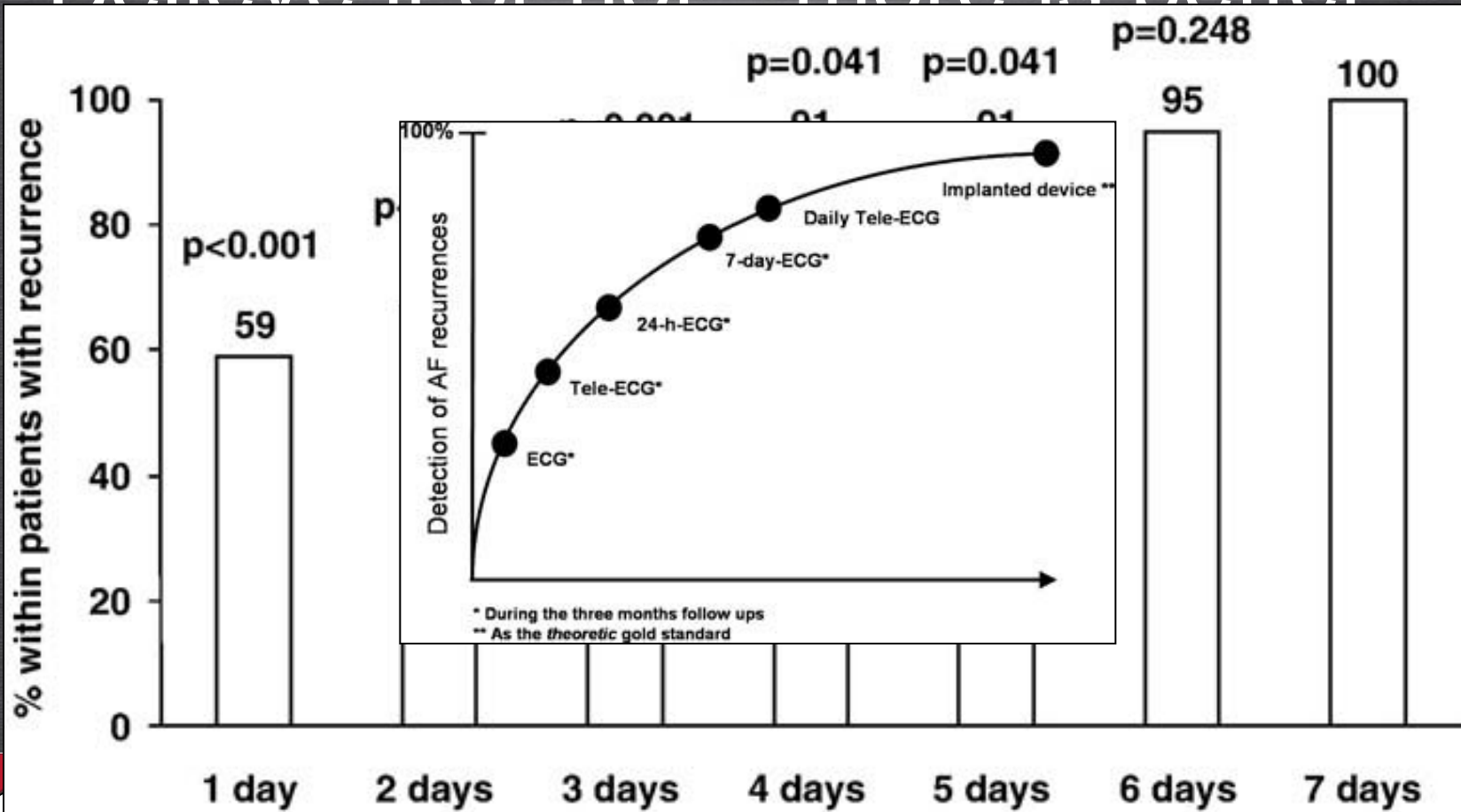
- I wish I had one...
- Nobody pays me to talk about Holters...
- Anybody interested....?



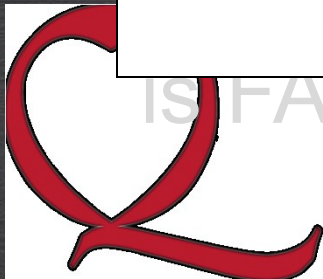


# Holter – Event Monitors

Believe it or not more is better

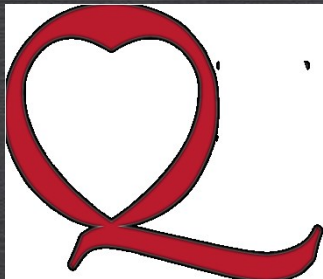


IS FALSE!!!



# Holters – Event Monitors

- Good quality is paramount
- Extended monitoring yields better results
- New equipment is lighter, higher adherence by patients
- Indications recently reviewed by experts (ISHNE-HRS-ISE Panel – In press)

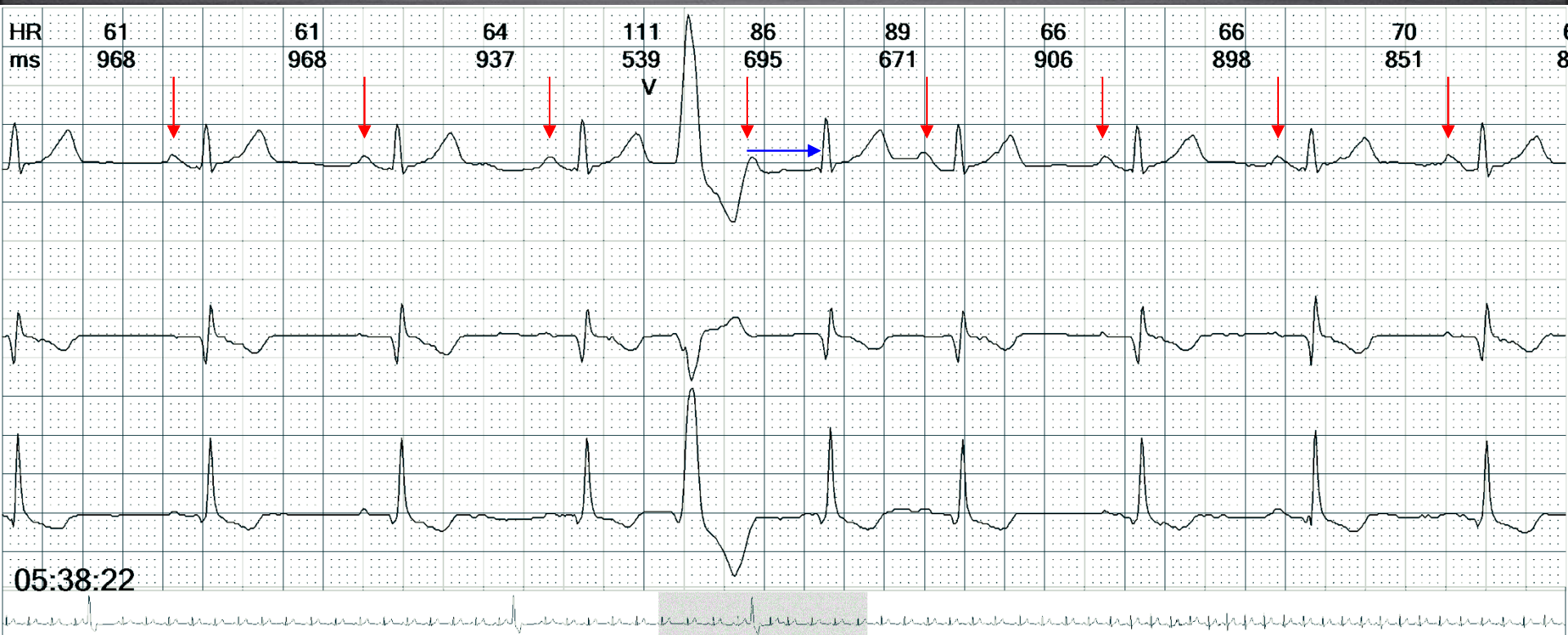




# Holter Exercise

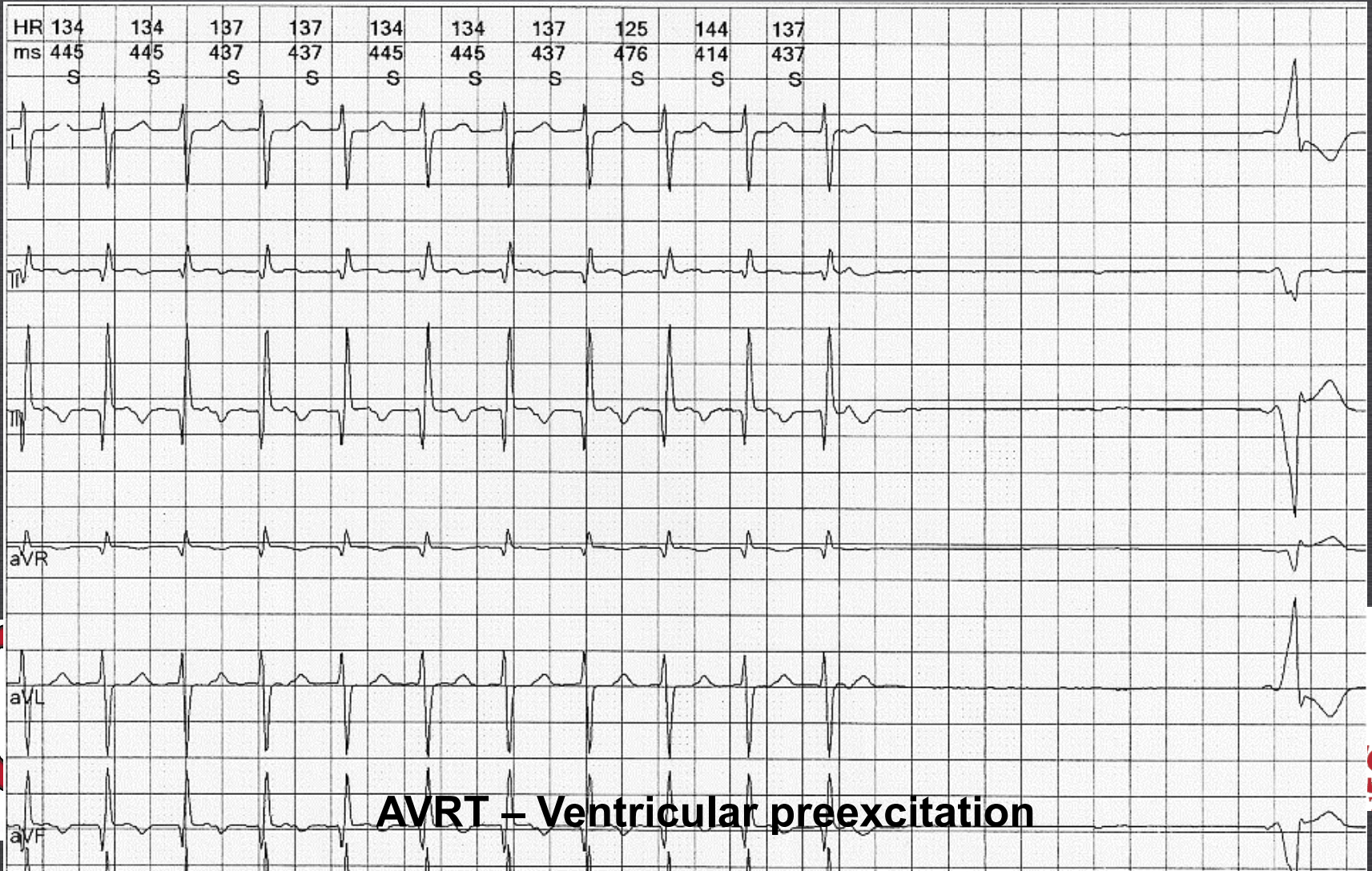
## Level of difficulty 1

### Concealed Retrograde Penetration of the AV node



# Holter Exercise

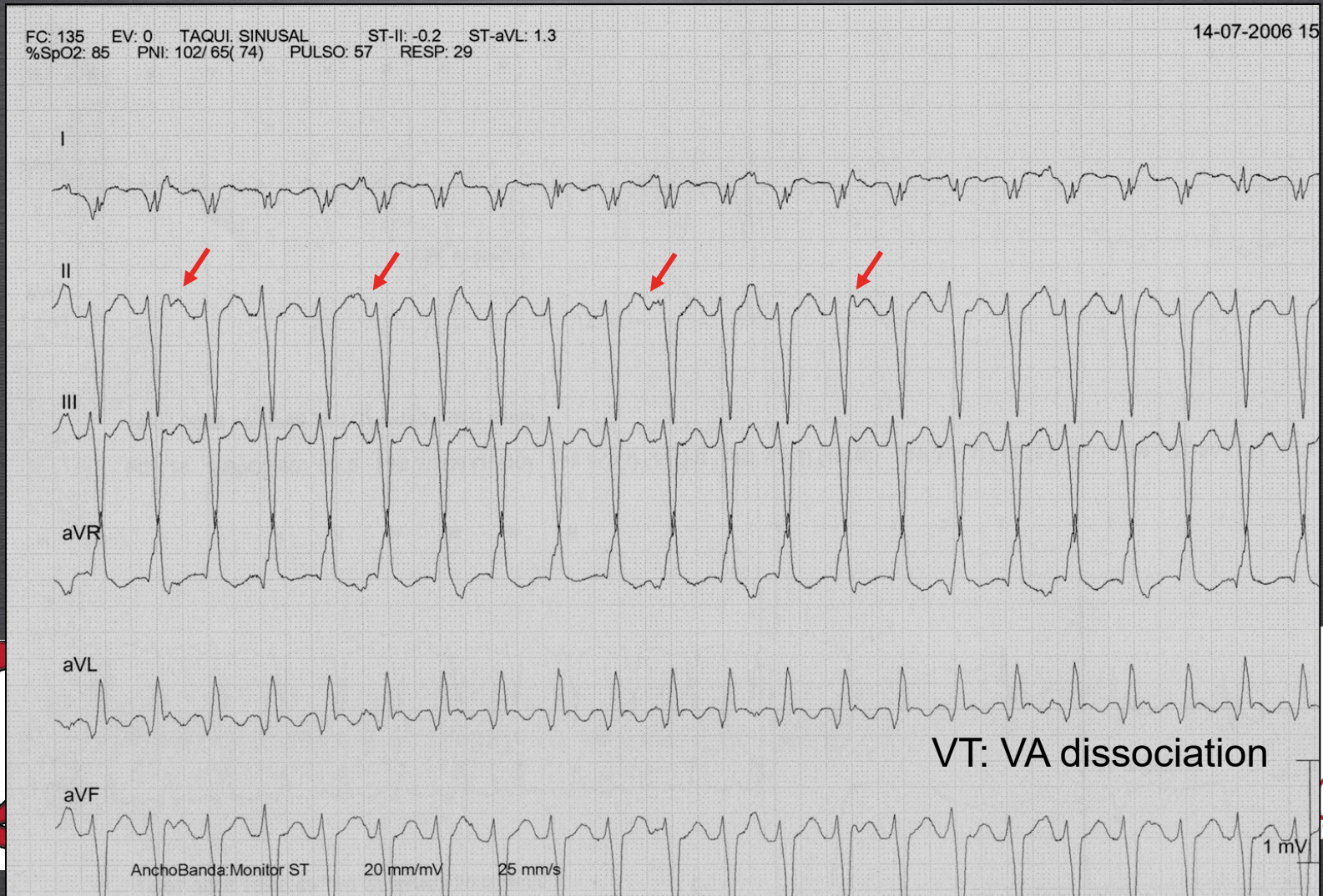
## Level of difficulty 1: AVNRT or AVRT?





# Holter Exercise

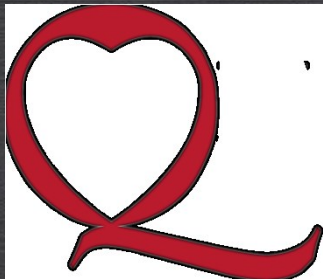
## Level of difficulty 1: VT or SVT?





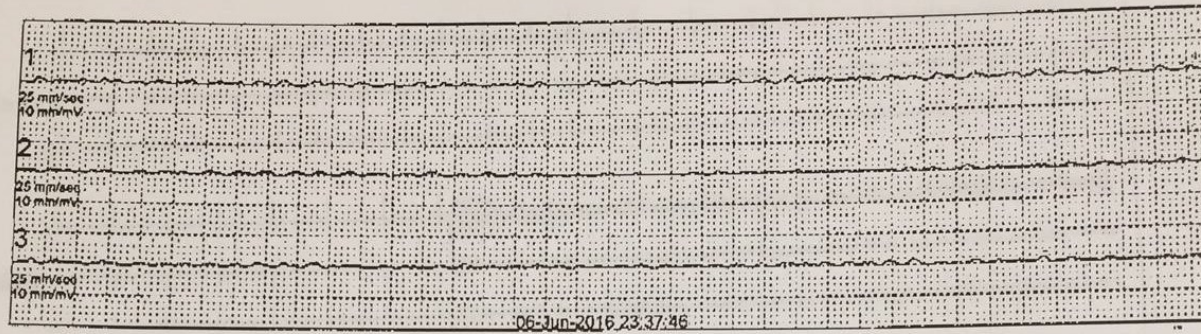
One of these 2 birds is an  
Electrophysiologist...guess which one?

Who of these 2 is an EP Doctor?

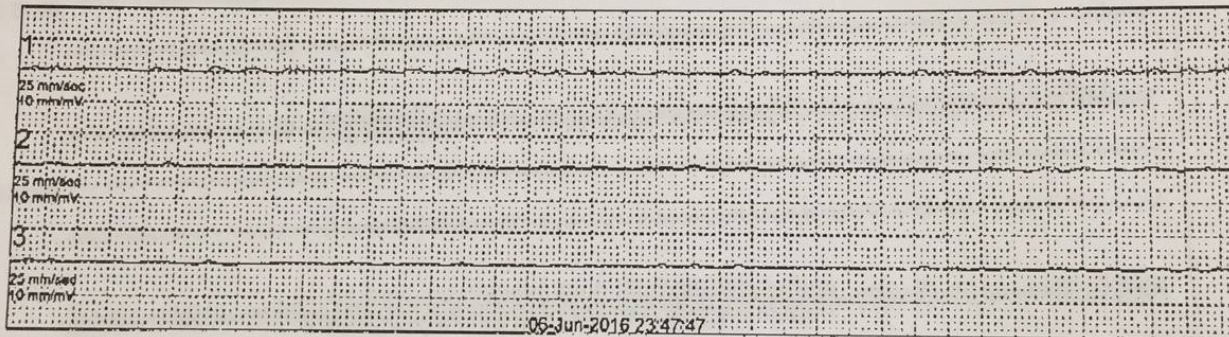




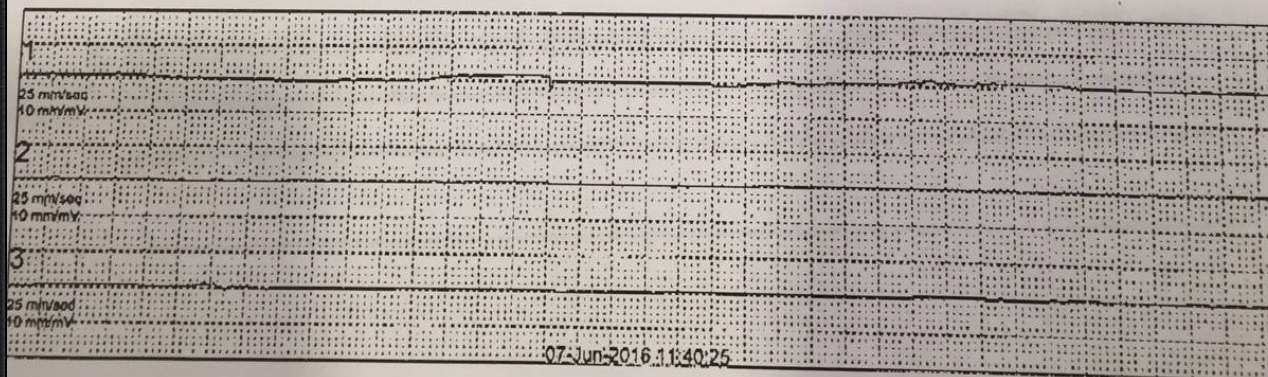
## ASYSTOLE



## ASYSTOLE



## END OF SCAN



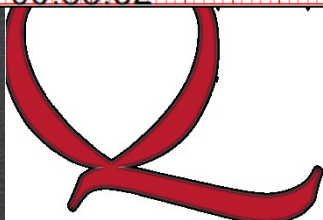
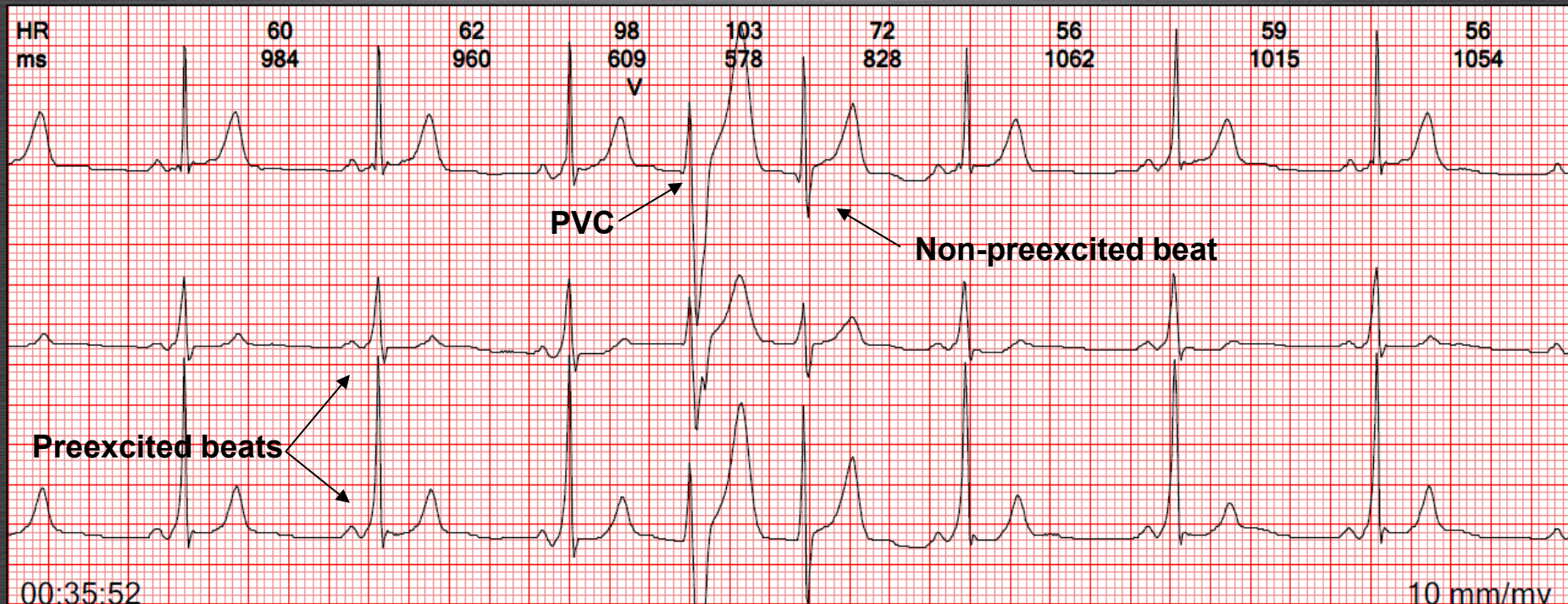
Holter Exercise  
level of difficulty 1:  
the Holter nobody  
wants to read...



# Holter Exercise

## Level of difficulty 2:

### What is this “extra beat” doing?

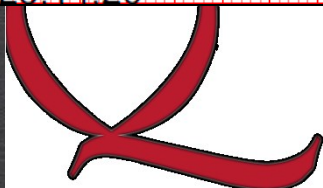
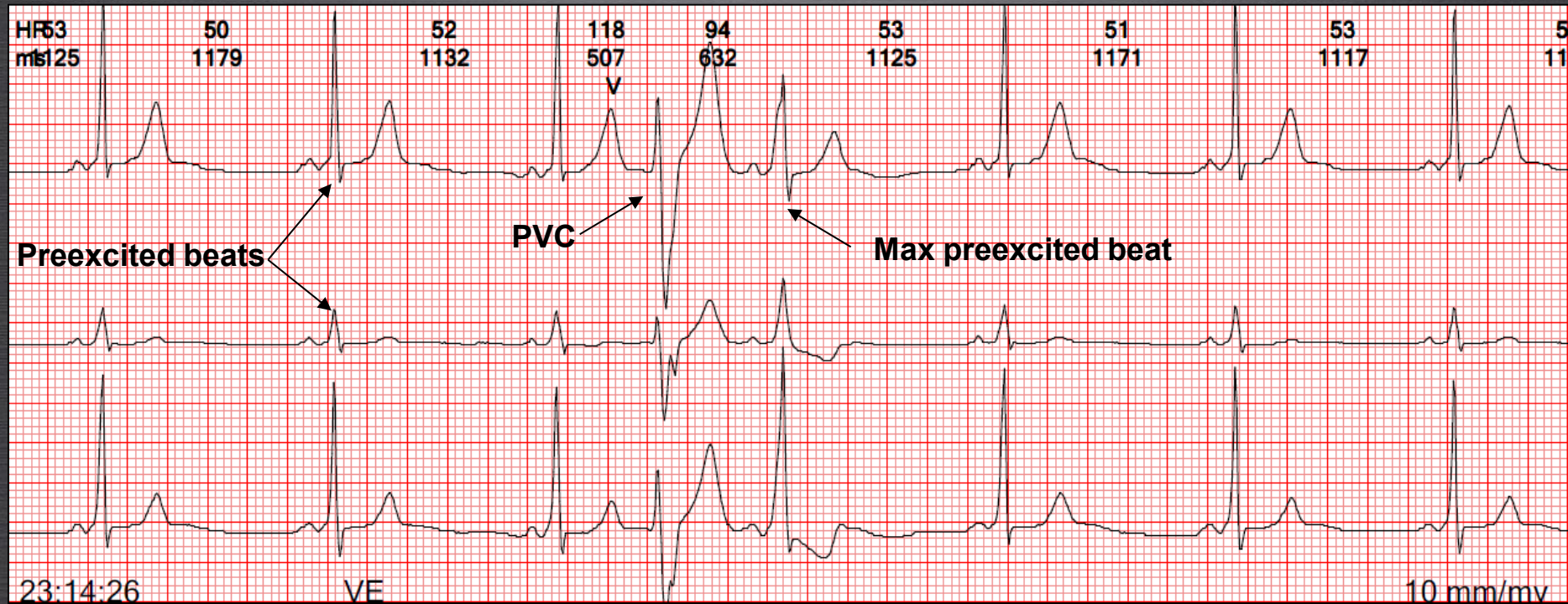




# Holter Exercise

Level of difficulty 2:

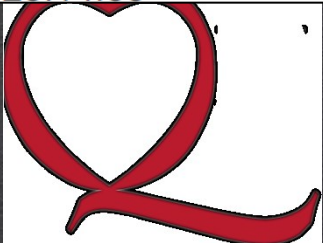
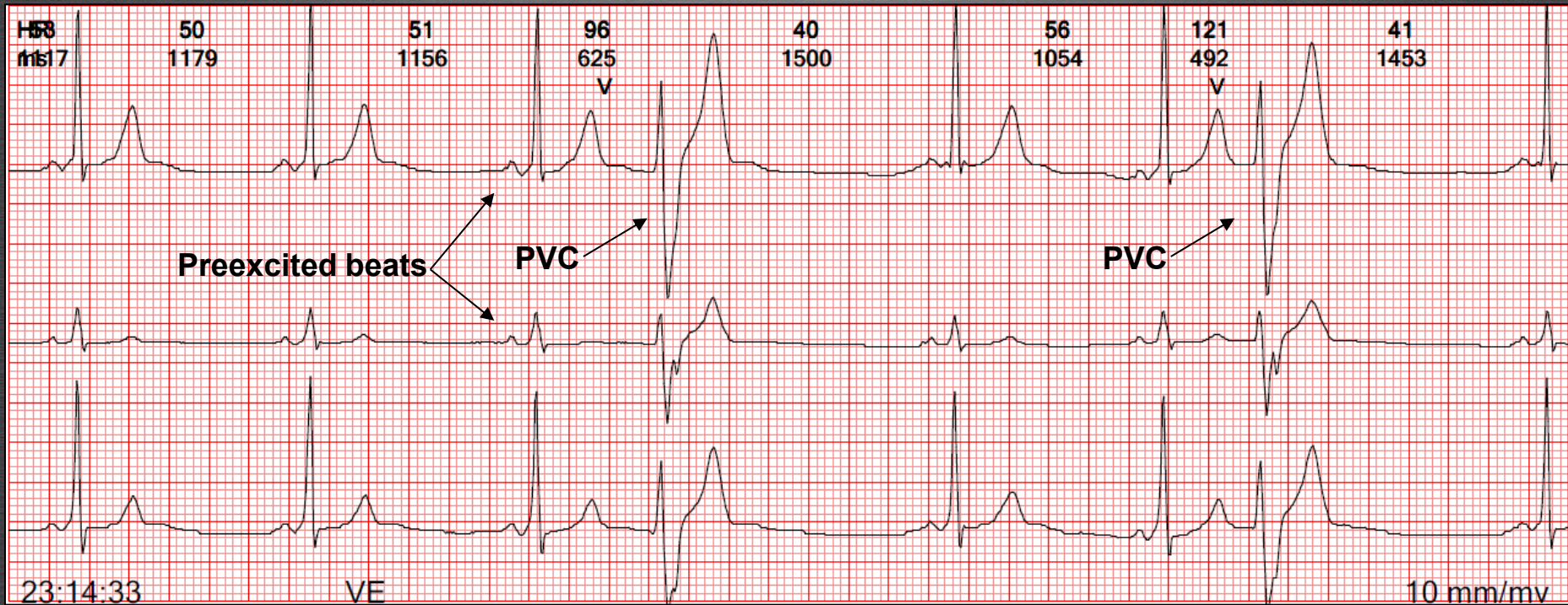
And what is this other“extra beat” doing?



# Holter Exercise

## Level of difficulty 2:

### And these ones?

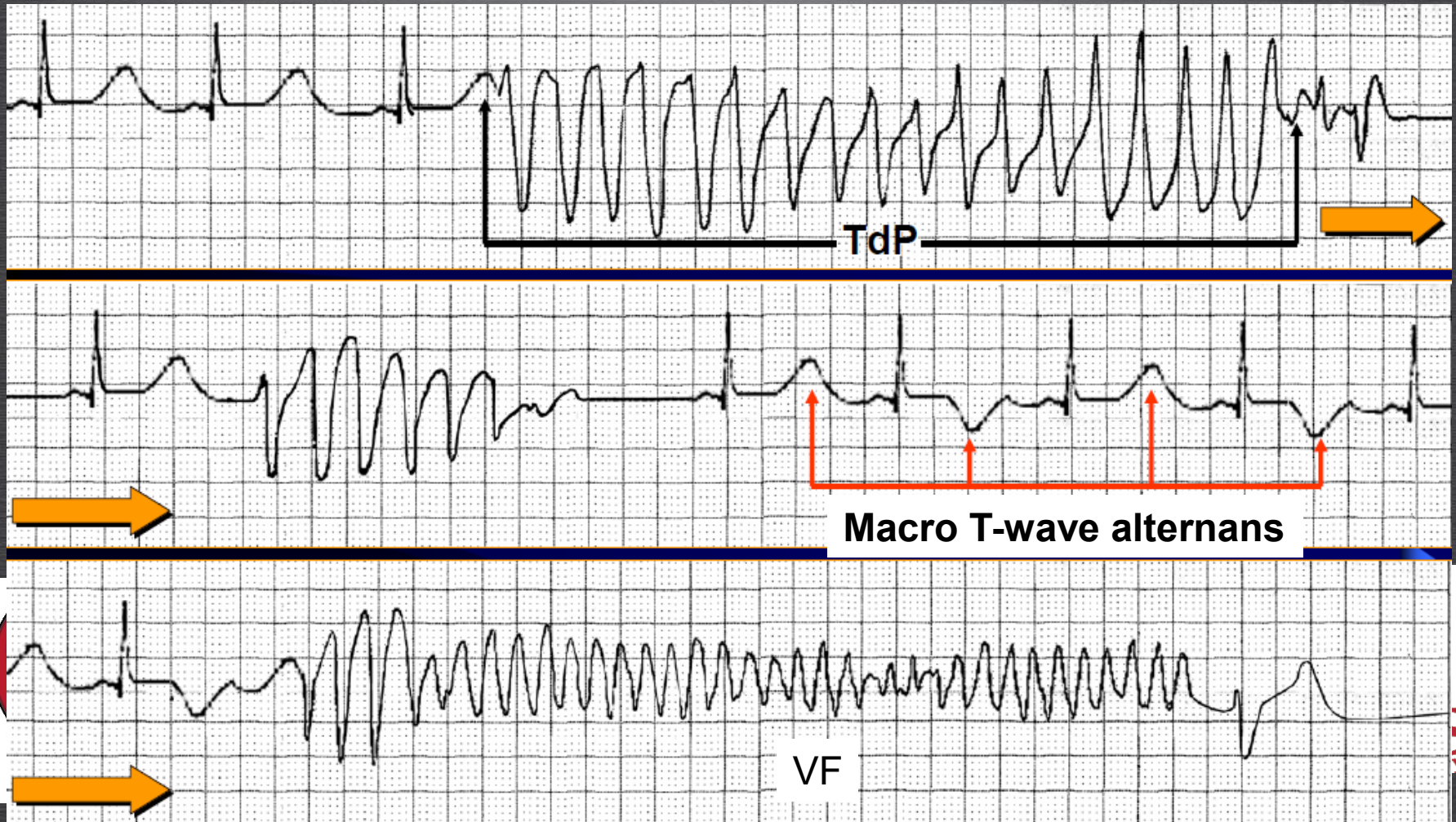




# Holter Exercise

Level of difficulty 2:

Ischemic polymorphic VT or TdP?





# Holter Exercise

## Level of difficulty easy (but cool!)

- 68 y/o woman, 3 episodes of syncope in the last 3 months
- No prior CV history
- Referred for 24-Hr Holter monitoring (this phenomenon occurred 6 times/24 Hs)

- What's your diagnosis?
- How would you manage this case?

