

# AED Case Report

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# History

- 57 year old physician from Scottsdale
- PMH of Paroxysmal Atrial Fibrillation only
- Meds: His Cardiologist recently placed him on Flecainide to prevent A. Fib.

# History

- After getting off a plane, he felt dizzy.
- He had shortness of breath
- And chest tightness.

# History

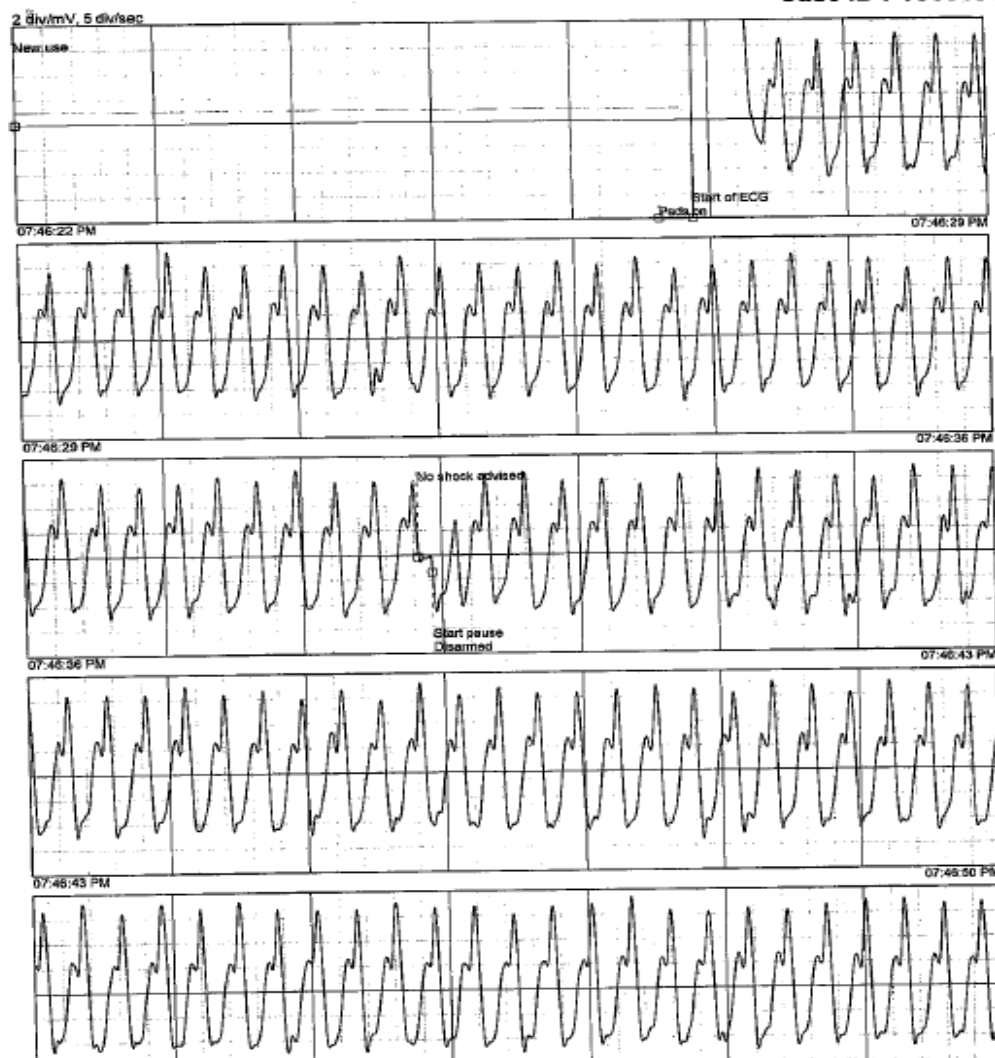
- He was unable to feel his own pulse.
- He layed down next to a TSA checkpoint.
- Took off his shirt and asked the TSA agents to get an AED.
- They put the AED pads on his chest and turned it on.

The next slide is the rhythm  
that he saw on the AED screen.

Case Date: 3/14/2010 07:48:22 PM

**ENTIRE ECG**

Case ID : 10031512414!



What is your interpretation?



V. Tach.?

SVT (aberrant)?

A. Fib. (aberrant)?

# Wide QRS Tachycardia

- V.Tach. occurs 85-90%
- SVT (aberrant) 10-15%

The patient thought it was V. Tach!

Remember that it was on a AED screen.

**No Shock Advised!**

- He asked the TSA agents if they could override the AED.
- They said “No”.
- But they could turn it off and then on again
- Which they did.

The background is a solid dark blue color with a pattern of lighter blue diagonal lines radiating from the top right corner towards the bottom left.

**Shock Advised!**



The background is a solid dark blue color with a pattern of lighter blue diagonal lines radiating from the top right corner towards the bottom left.

# Charging!

Stand clear of patient!

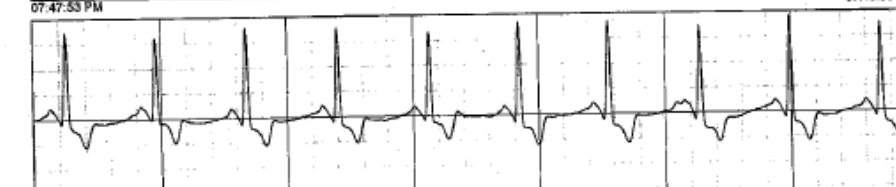
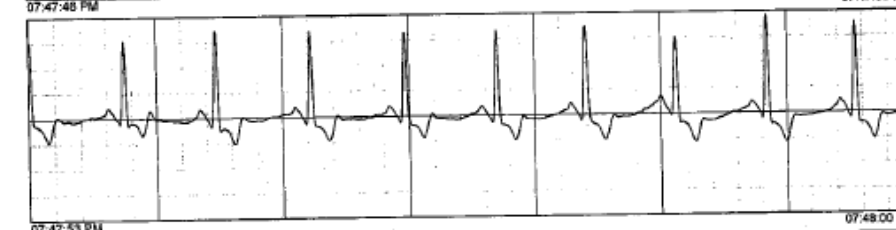
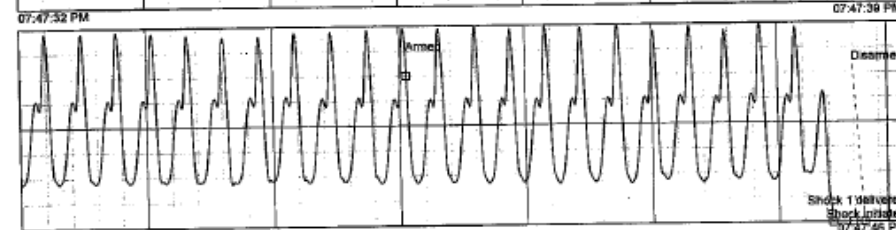
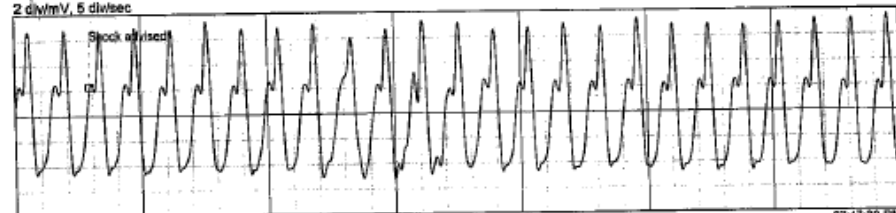
He then asked them to push  
the flashing orange button,  
which they did.

**150 J Shock Delivered!**

Case Date: 3/14/2010 07:46:22 PM

**ENTIRE ECG**  
Case ID : 100315124145

2 div/mV, 5 div/sec



Within a few seconds, he told the TSA agents that he felt “much better” and then thanked them for “saving his life”.

# Phoenix Fire was called.

- Paramedic Engine Co. on scene (4:48)
- The patient was awake and alert.
- Vital signs were normal.
- He did have 2 oval-shaped red marks on his chest.
- He was transported to his hospital after a lidocaine bolus and infusion started.

- He was asymptomatic during transport.
- His cardiac workup at the ED was negative. No evidence of acute MI.
- He was later released to follow up with his cardiologist.
- The physician and his cardiologist were sent a copy of the AED rhythms.

# Flecainide

- Class 1 C anti-dysrhythmic agent
- Well known to be proarrhythmic
- Prolongs PR, QRS, effective refractory period
- Known to cause Ventricular Tachycardia



# Medline Search

Two cases of “Self-Cardioversion” and  
“Self-Administered Electroshock” have  
been  
reported since 1995.

# Self-Cardiversion

- 40 y.o. plastic surgeon felt an electrical shock from a 110-V wall socket. (lamp)
- Felt his heart racing, put himself on a heart monitor. Noted rapid A. Fib. 160/min
- Felt dizzy—like he was going to pass out.

# Self-Cardioversion

- He gave himself 2 (100 J) shocks!
- He fell off the table that he was on.
- Luckily did not hurt himself.
- Subsequent heart monitoring did not show any recurrence of the arrhythmia.

NEJM 332(9):614 Mar. 2, 1995

# Self-Administered Electrshock

- 25 y.o. male psychiatric patient
- Brought to E.D. by paramedics
- On a 72 hour hold for a suicide attempt
- PMH: 4 prior suicide attempts (depression)
- Placed in a cardiac monitoring room

# Self-Administered Electroshock

- Patient asked for a urinal. Curtain drawn.
- Loud noise heard. Patient fell to ground.
- ED staff found patient with 2 large round red marks on his chest!
- The Zoll 1200 defibrillator automatic print out read 300 Joules had been delivered.

# Self-Administered Electroshock

- Patient was monitored for 72 hours.
- Serial EKGs and cardiac enzymes WNL  
Patient was transferred to Psych. Service.

Amer. J. of E.M. 14(1) 115-116 JAN 1996

Questions?