

Why do we need a pacemaker, Doctor?

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The Case of the Conservative Croatian

- ♥ 27 year old lady seen at OPC for palpitations of several months
- ♥ Last 5 minutes to several hours
- ♥ Previous echo structurally normal heart
- ♥ First degree AV block on ECG
- ♥ Plan for event recorder



At review:

♥ Symptoms for 2 years – may lose vision and sway but not collapse

♥ Not keen for a pacemaker



Measurements:

Rate
56 - 66 (bpm)

PR
0.25 - 0.25 (s)

QRS
0.11 - 0.10 (s)

QT
0.44 - 0.44 (s)

Sample 1

Received: 09:53:10

25 mm/sec, 16 mm/mV

End

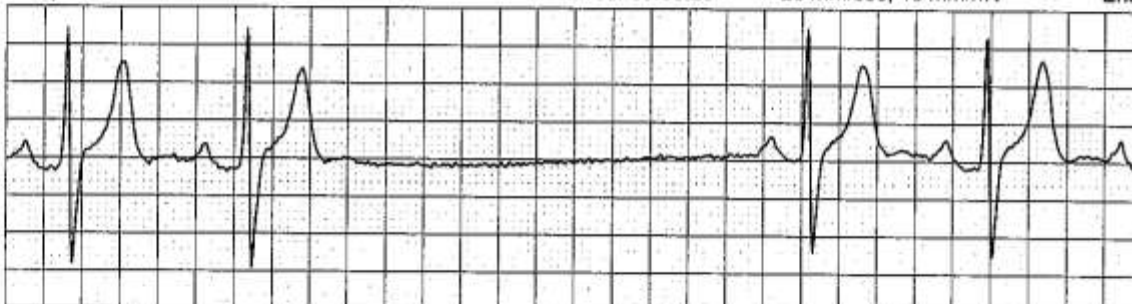


Sample 2

Received: 09:53:20

25 mm/sec, 16 mm/mV

End



Sample 3

Received: 09:53:32

25 mm/sec, 16 mm/mV

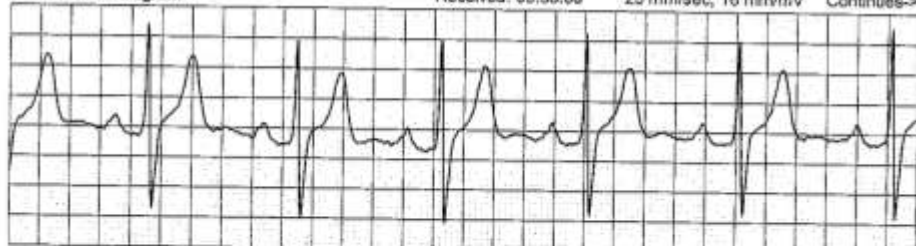
End



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Additional cardiogram

Received: 09:55:08 25 mm/sec, 16 mm/mV Continues->



Received: 09:55:14 25 mm/sec, 16 mm/mV Continues->



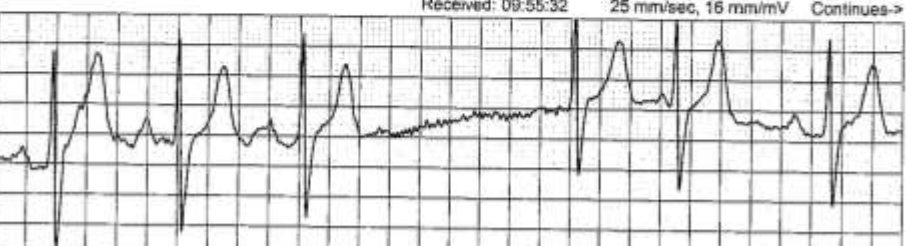
Received: 09:55:20 25 mm/sec, 16 mm/mV Continues->



Received: 09:55:26 25 mm/sec, 16 mm/mV Continues->



Received: 09:55:32 25 mm/sec, 16 mm/mV Continues->



Measurements:

Rate
12.9 - 60.0 (bpm)

PR
0.25 - 0.22 (s)

QRS
0.14 - 0.15 (s)

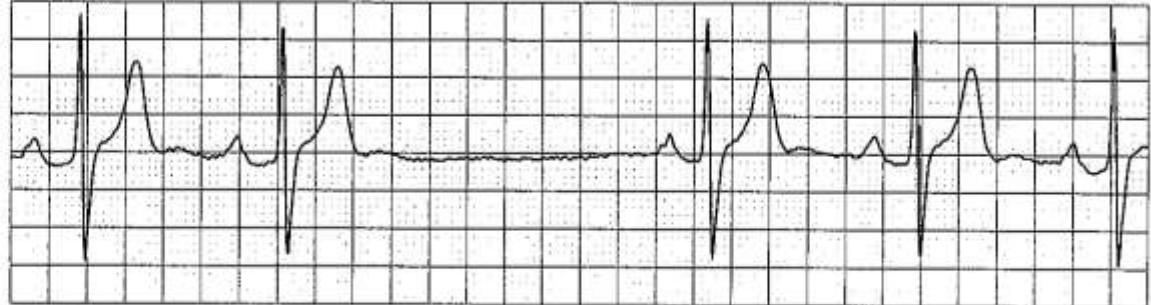
QT
0.47 - 0.48 (s)

Sample 1

Received: 09:54:43

25 mm/sec, 16 mm/mV

End

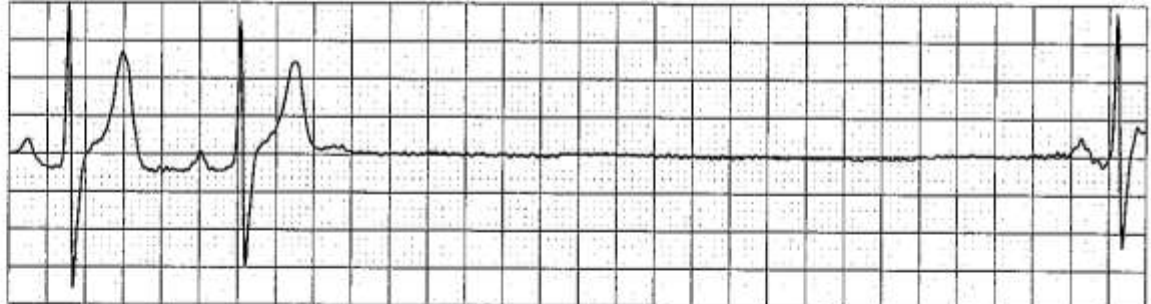


Sample 2

Received: 09:55:25

25 mm/sec, 16 mm/mV

End



Sample 3

Received: 09:55:46

25 mm/sec, 16 mm/mV

End



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Decision

- ♥ Sick sinus syndrome but not prognostically dangerous
- ♥ Okay to watch and wait

The Case of the Doubtful Doctor

- ♥ 62 year old GP with 2 syncopal episodes
- ♥ First 2 years ago: while examining a patients eye felt dizzy and found himself on the floor
- ♥ Immediate recovery
- ♥ 2 years before ECG showed LBBB with normal treadmill and echo



- ♥ Second episode 20 months later
- ♥ Had walked briskly up hill and descending when blacked out
- ♥ Momentary dizziness then fell grinding glasses into his face
- ♥ Normal coronary angiogram
- ♥ Referred for REVEAL implant



Date

27-10-10

muscle bridge

Ca++

previous intervention

A= Apex

D=Diagonal

O=Obtuse marginal
PL= Posterolateral

Cine Number

Operator

JS

Entry site

RRA

Catheters & F size

SF JLA
AR med
Pigtail

Contrast

Isovue

GTN

Y N

AoV grad

Y N

MRegurg

Y N



Diastole

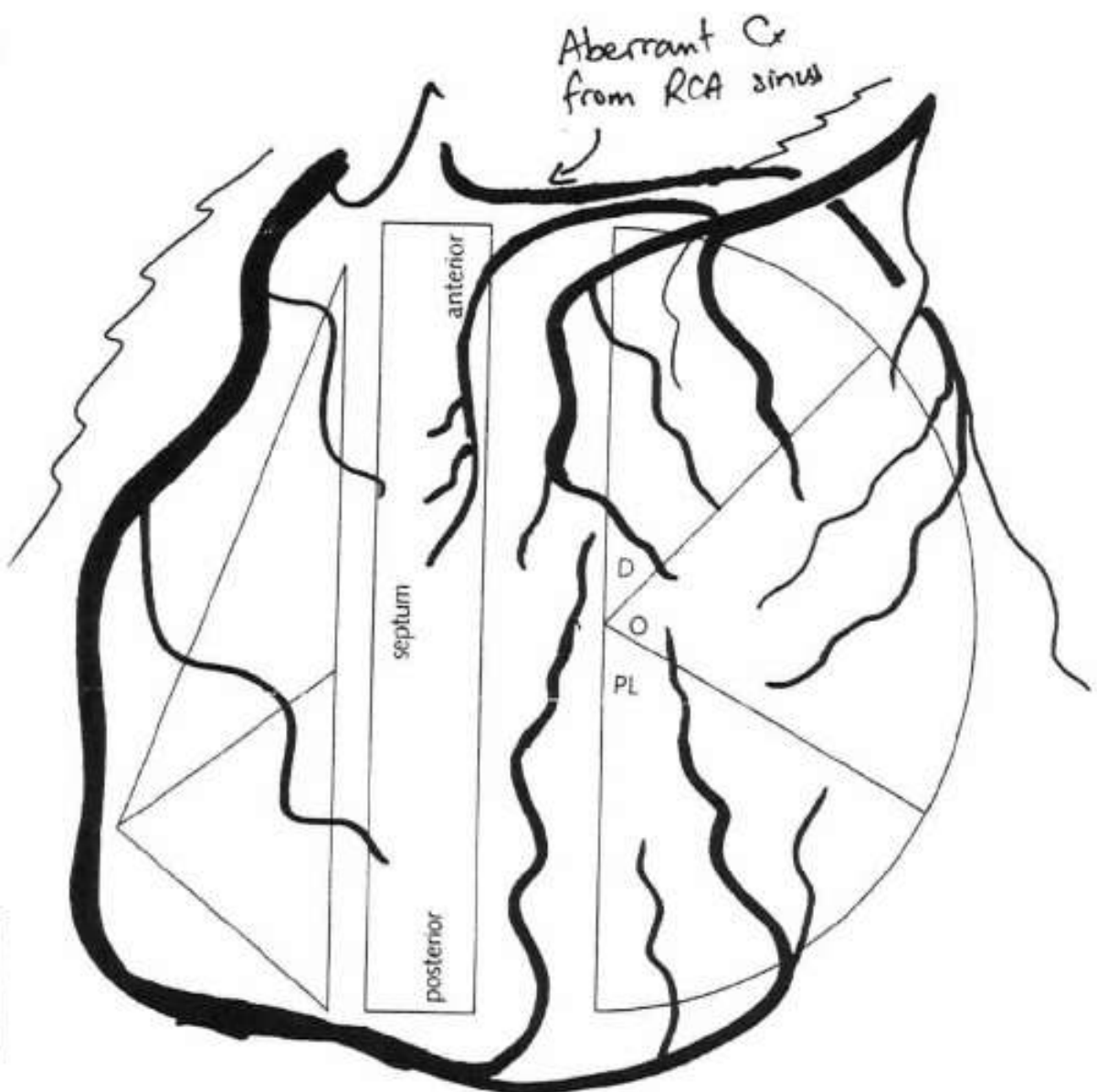
155.7	24.6
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Systole

51.4	27.9
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EF

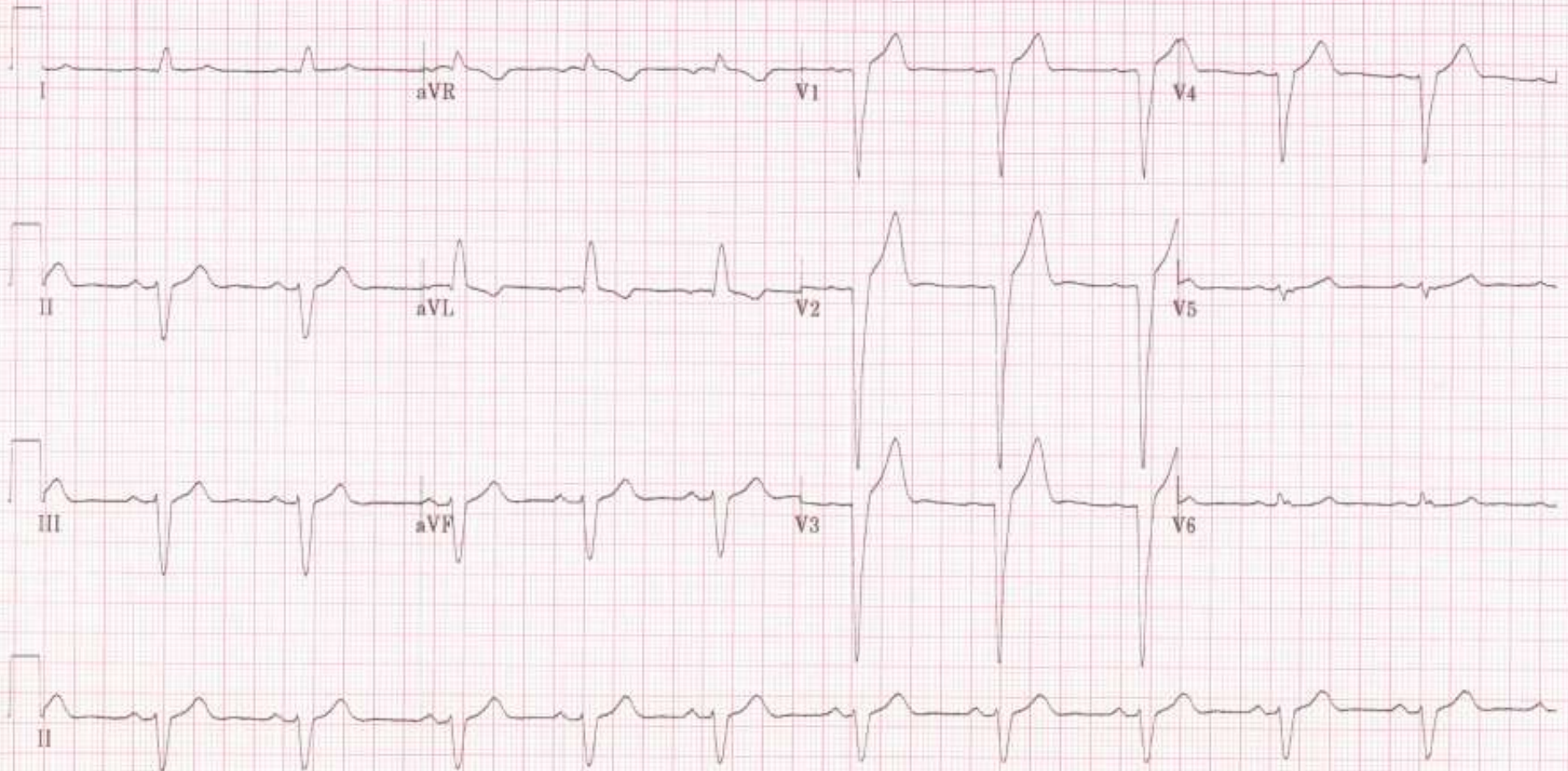
67%	LV Pressure 124/19
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SUMMARY

Ward/Dept: C.O.P

Comments:



150 Hz 25.0 mm/s 10.0 mm/mV

4 by 2.5s + 1 rhythm ld

MAC5K 008B

12SL™v237



Decision

- ♥ Paroxysmal AV block in Purkinje tissue with risk of sudden death
- ♥ Therefore permanent pacemaker

The Case of the Phlegmatic Pharmacist

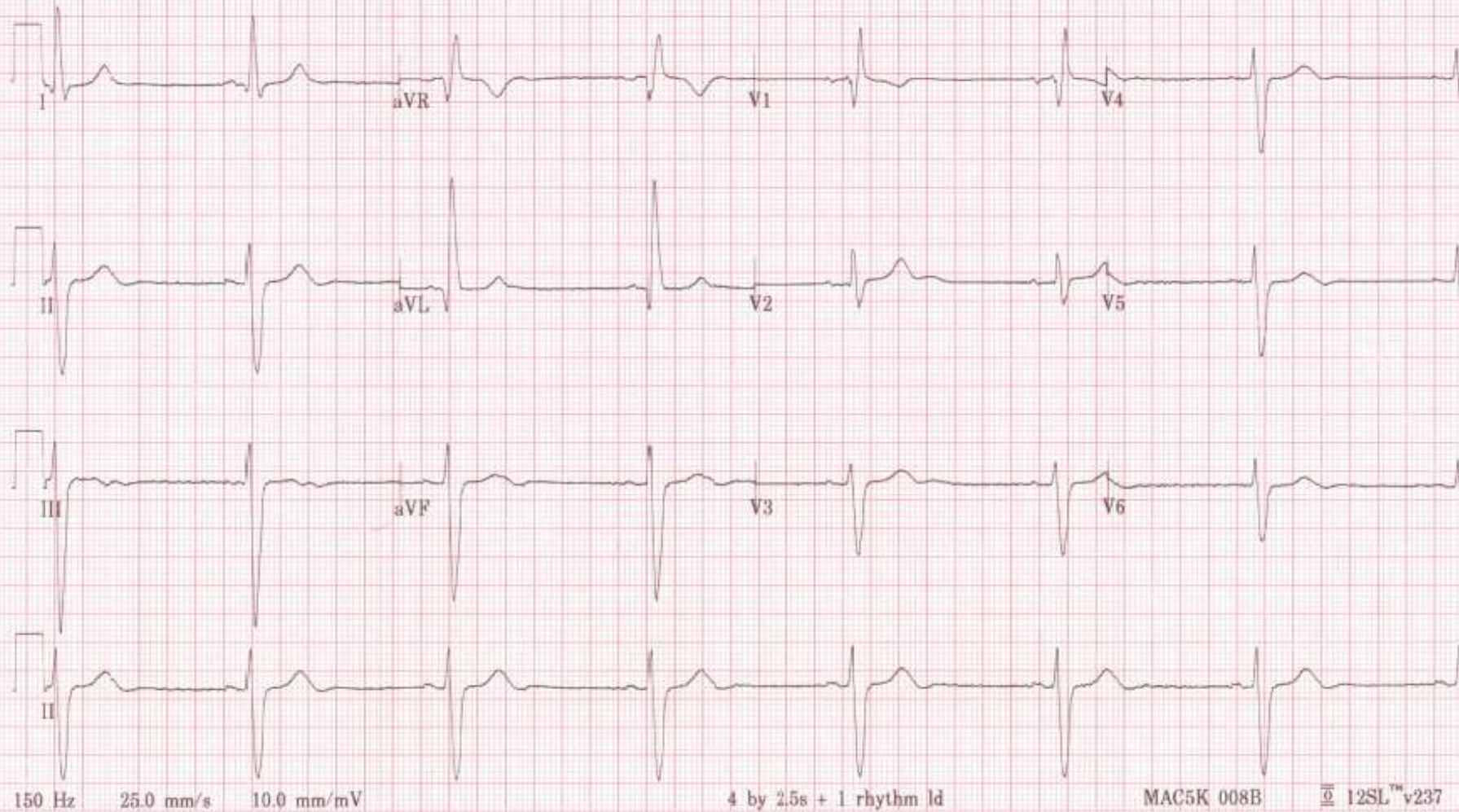
- ♥ 82 year old retired pharmacist, keen runner, treated hypertension and hypothyroidism
- ♥ After 5km pulled from the race because of dizziness, headache and staggering gait
- ♥ Refused to go to hospital
- ♥ Another dizzy episode walking up One Tree Hill



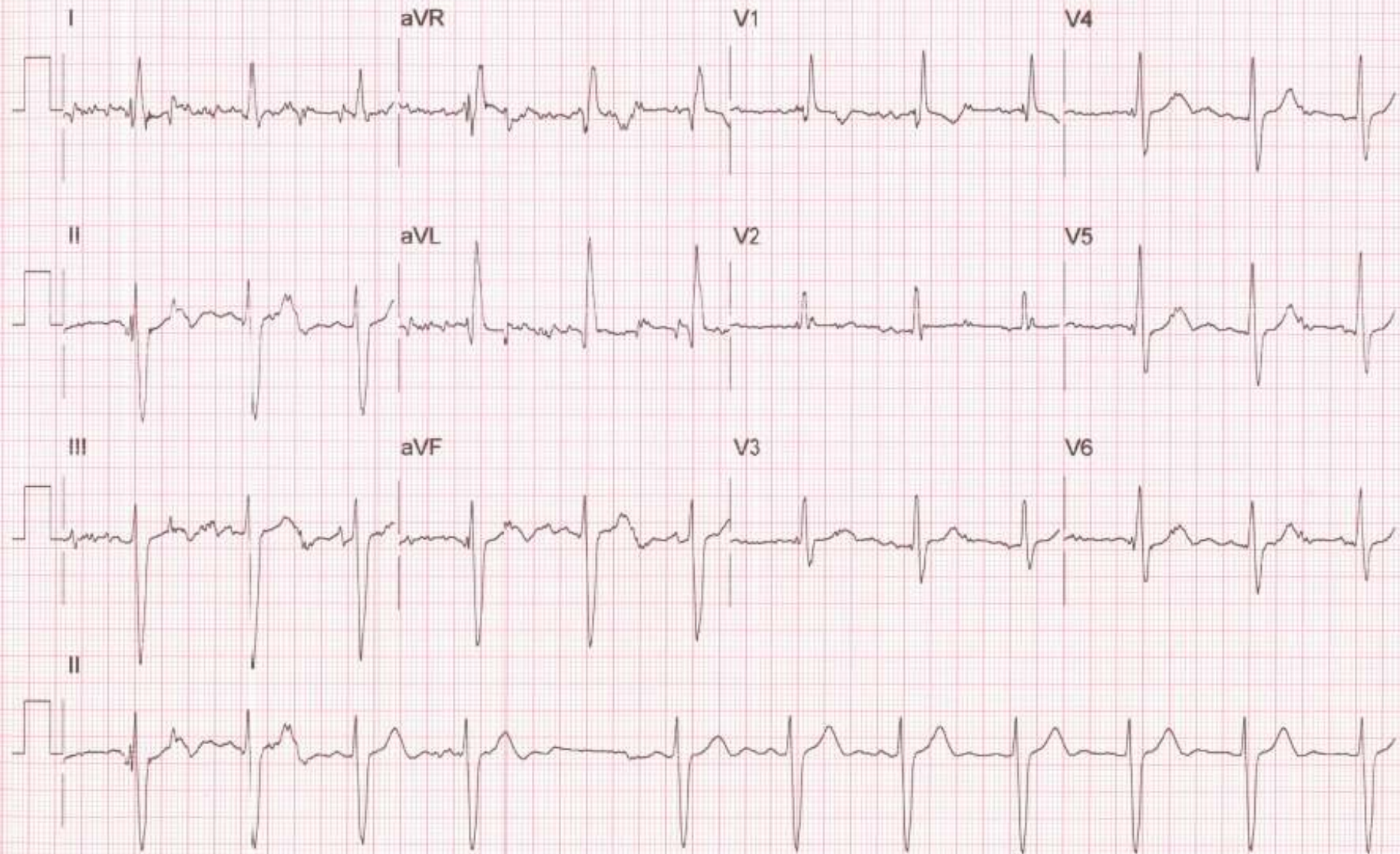
- ♥ Subsequent admission with chest pain and hypertension
- ♥ Pauses up to 6 seconds post iv labetalol
- ♥ ETT short pauses

Ward/Dept: apu

Comment:



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3/05/2011

11:50:11 a.m.

25 mm/sec 10 mm/mV BWF On MAF On Line Off 40Hz Off Page 8



Decision

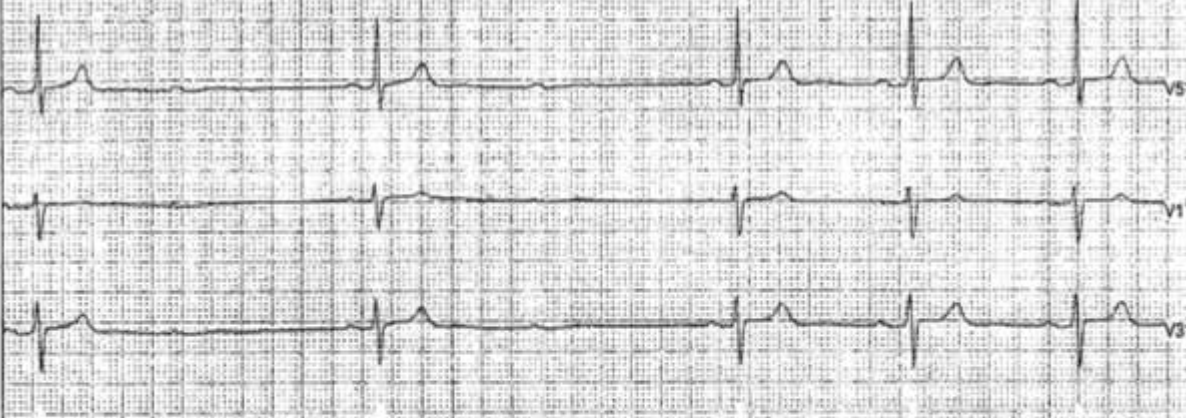
- ♥ Evidence of block in Purkinje tissue
- ♥ Advise pacemaker for prognostic reasons

The Case of the Chagrined Charge Nurse

- ♥ Symptomatic PAT despite treatment
- ♥ Radiofrequency ablation for AVNRT complicated by second degree block
- ♥ Permanent pacemaker 15 days later

12:23:35 d2 Pause (2.42 Seconds)

38 BPM

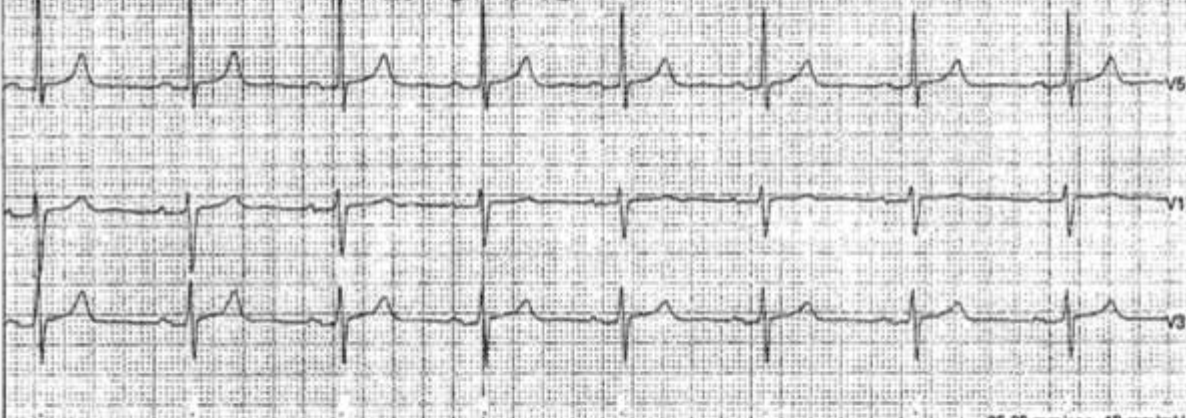


25 25.00 mm/sec, 10 mm/mV

12:34:38 d2 Patient Reported Symptom *

Abac worm in chest

59 BPM

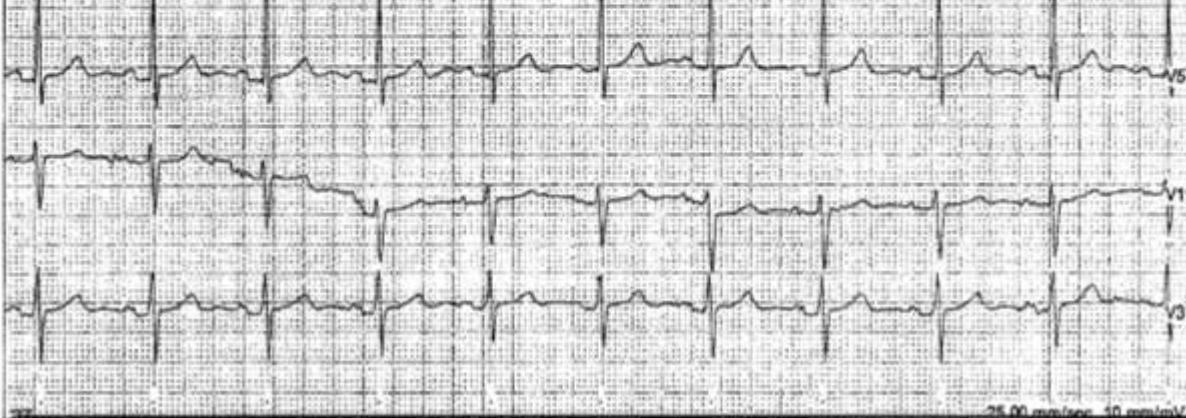


25 25.00 mm/sec, 10 mm/mV

12:50:45 d2 Patient Reported Symptom *

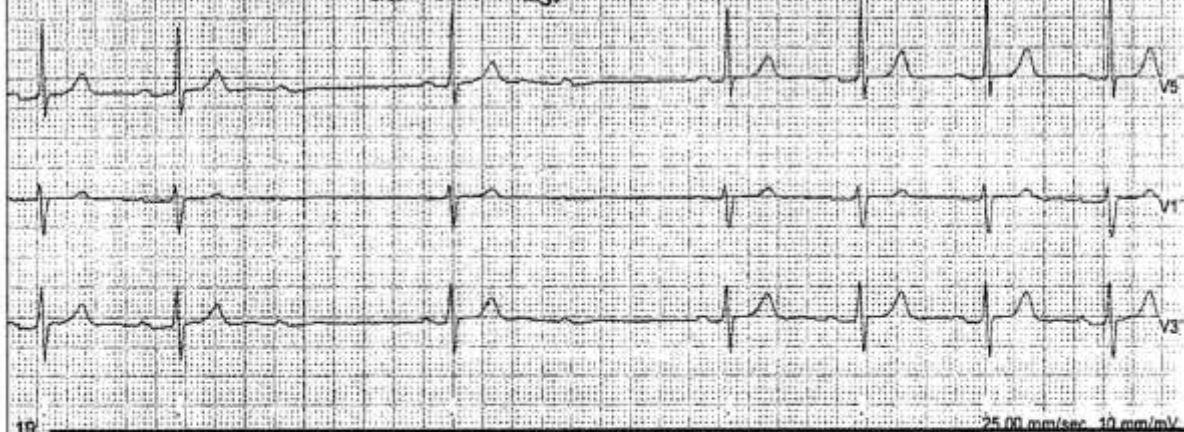
Abac worm in chest

79 BPM



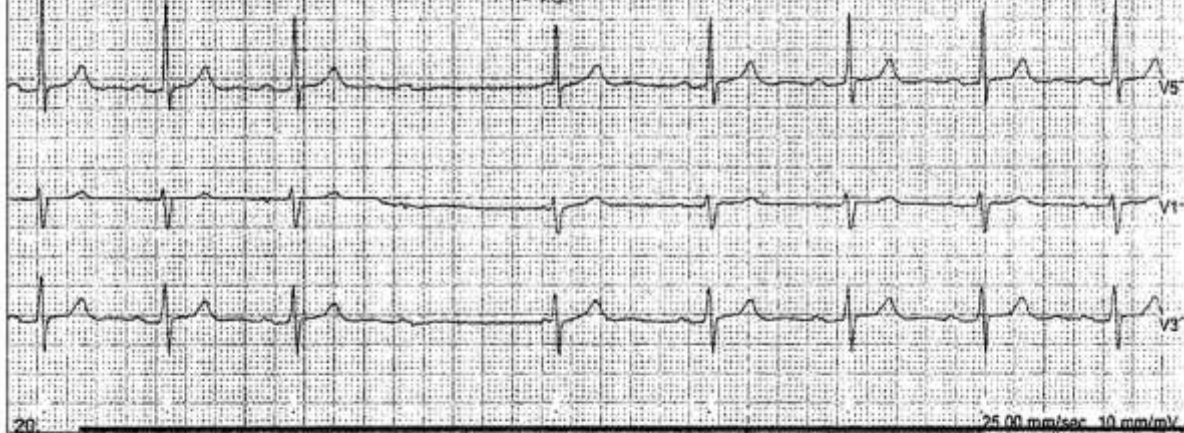
25 25.00 mm/sec, 10 mm/mV

10:59:44 a2 Patient Reported Symptom * 'Ausc - normal chest' 32 66 71 71 55 BPM



19 25.00 mm/sec 10 mm/mV

11:20:55 a2 Patient Reported Symptom * 'Ausc - normal chest' 72 68 83 57 64 66 66 60 BPM



20 25.00 mm/sec 10 mm/mV

11:20:42 a2 Patient Reported Symptom * 'Ausc - normal chest' 68 66 66 67 66 67 68 68 67 BPM



21 25.00 mm/sec 10 mm/mV

Min VT rate: 100 bpm Min SVT rate: 80 bpm SVT escape rate: 30 % Bradycardia rate: 50 bpm

- ♥ Procedure - DAY 0
- ♥ First Holter - DAY 2
- ♥ Second Holter - DAY 4
- ♥ Third Holter - DAY 13
- ♥ Dual Chamber pacemaker DAY 15
- ♥ Lead repositioning - DAY 28
- ♥ Pacemaker reprogramming 10x since implant

Percentage pacing

