

10. Atriyal Fibrilasyon Zirvesi

PACEMAKER – ICD – CRT SORUN GİDERME KURSU

ICD

Vaka Örnekleri ile Sorun Giderme

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Güven Hastanesi, Ankara

11 Kasım 2021, Perşembe

Olgu 1

65 yař, erkek, DKMP, EF %30

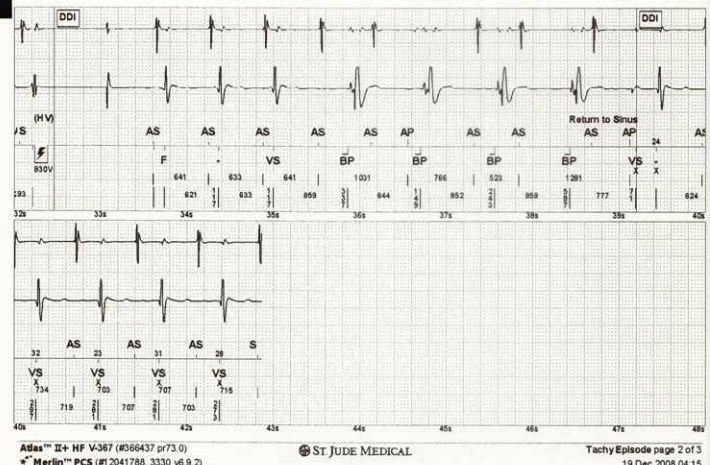
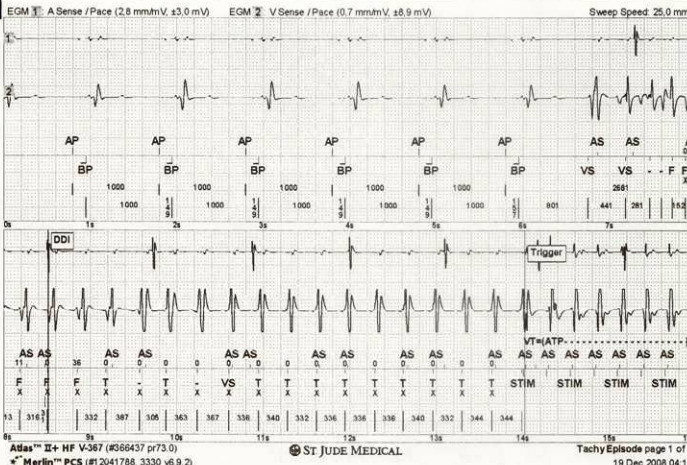
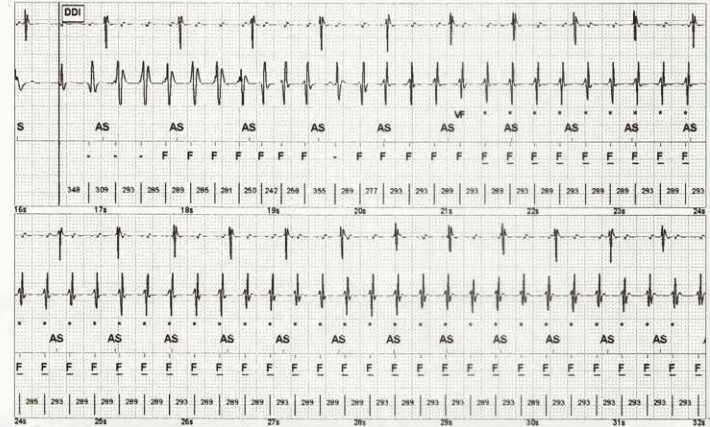
Primer korunma Abbott – St Jude ICD

Presenkop yakınması var

Rutin kontrolde aritmi kaydı

Olgu 1

Tachy Episode 1 of 1		Date/Time: 28 Nov 2008 02:15	Type: VT (Therapy Delivered)	Episode Duration: 0:32
Diagnosis: VT Time to Diagnosis: 6.25 sec CL 340 ms/176 min⁴		Alerts: 2 Therapy accelerated rhythm; ATP therapy unsuccessful		
Time to Diagnosis: 6.25 sec CL 340 ms/176 min⁴ VT Diagnosis Criteria: Any Rate Branch: Sinus Tach (V = A) Rate Branch Morphology Programmed: On, ≥ 90% is a match, ≥ 5 of 8 matches indicate SVT, Template Updated: 17 Oct 2007 09:15 Measured: Min Match Score: N/A, Max Non-Match Score: 0%, No. Template Matches: 0 of 8 (VT Indicated) Sudden Onset Programmed: On, <100 ms indicates SVT, Measured Max Delta: 825 ms (VT Indicated)		Therapy: ATP Defib 36 J / 830V Results: Accel to VF, Below Rate Detection (CL 855 ms)		
		High Voltage Therapy Details Last Charge Time: 10.3 s Last Lead Impedance: 46 Ω Delivered PW: +5.9 ms, -5.9 ms		
		ATP Therapy Details: VT Burst 1: 272, 272, 272, 272, 272, 272 ms		



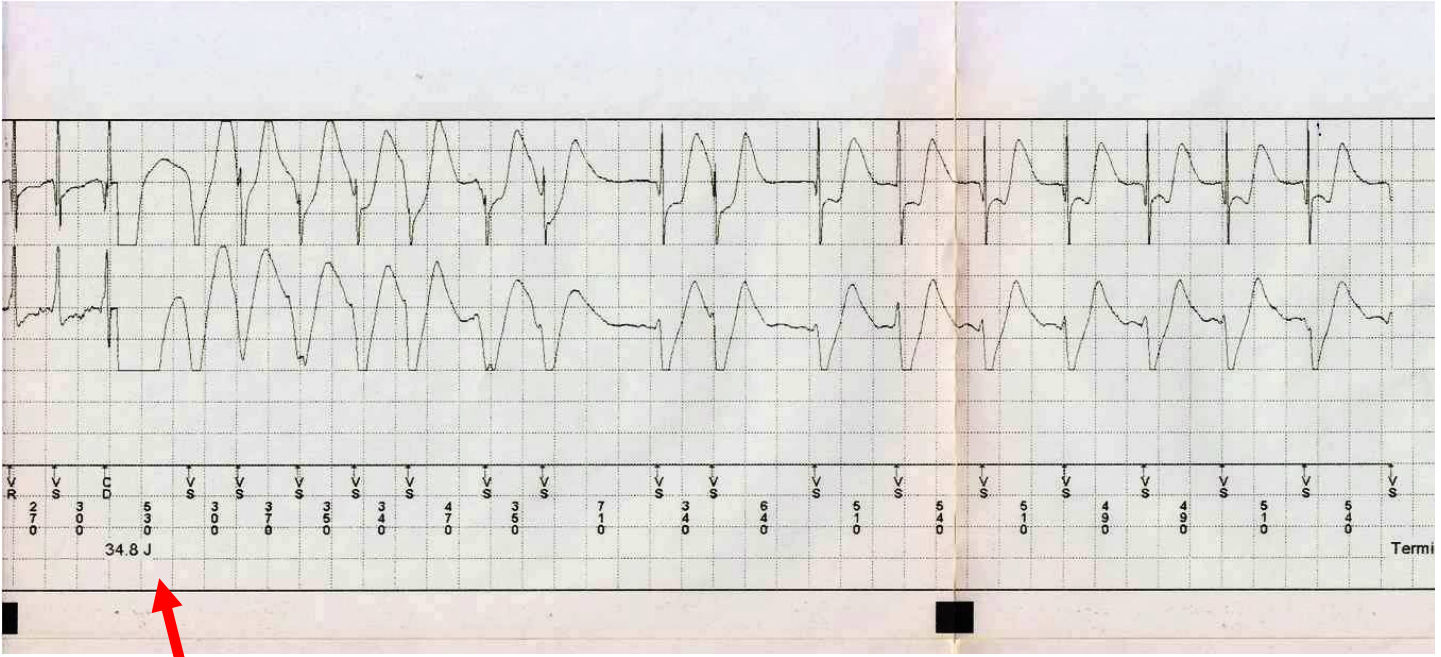
Olgu 2

72 yař, erkek

KAH, KKY, EF %27

Primer korunma ICD

řoklar nedeniyle başvuru



Olgu 3

72 yař, erkek, iskemik KMP

Kalp yetmezliđi nedeniyle CRT-D

4 ay önce batarya tükennesi nedeniyle batarya deđiřimi

ICD cihazından ses gelmesi nedeniyle kontrole geldiđinde

“RV lead integrity” uyarısı

Alert Events Report

Page 1

Alert Event List: 22-Aug-2012 12:12:52 to 31-Dec-2012 08:44:57

Date/Time	Event	Threshold
07-Dec-2012 04:11:14	*RV Lead Integrity warning: - 2 or more VT-NS episodes < 220 ms. - Sensing Integrity Counter >= 30 in 3 days.	
----- Last Programmer Session 24-Oct-2012 ----- (No data prior to last session.)		

*Alert may be re-triggered unless this condition is corrected or this alert is turned Off in Alert Setup.

Olgu 3

A		Lead Impedance Test Report		Page 1	
Last Lead Impedance Measurement					
17-Sep-2011					
	Programmed		Others		
A. Pacing	342 ohms				
RV Pacing	1311 ohms				
LV Pacing	552 ohms	(LVtip to RVcoil)	>3000 ohms (LVring to RVcoil)		
			>3000 ohms (LVtip to LVring)		
RV Defib	38 ohms				
SVC Defib	49 ohms				

B		Lead Impedance Test Report		Page 1	
Last Lead Impedance Measurement					
17-Sep-2011					
	Programmed		Others		
A. Pacing	342 ohms				
RV Pacing	798 ohms				
LV Pacing	532 ohms	(LVtip to RVcoil)	>3000 ohms (LVring to RVcoil)		
			>3000 ohms (LVtip to LVring)		
RV Defib	37 ohms				
SVC Defib	50 ohms				

Red arrows point to the RV Pacing values (1311 ohms in A, 798 ohms in B). Blue arrows point to the >3000 ohms values in the 'Others' column.

Non-sustained VT Episode #209

Page 1

Type	ATP Seq	Shocks	Success ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm A/V
VT-NS			209	17-Sep-2011	07:19	:01	--/286
		• V-V	□ A-A	VF = 300 ms	FVT = 220 ms	VT = 340 ms	

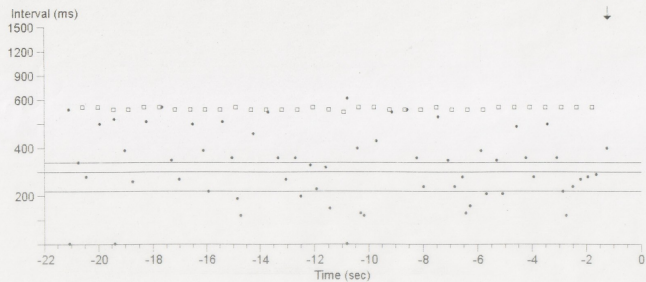
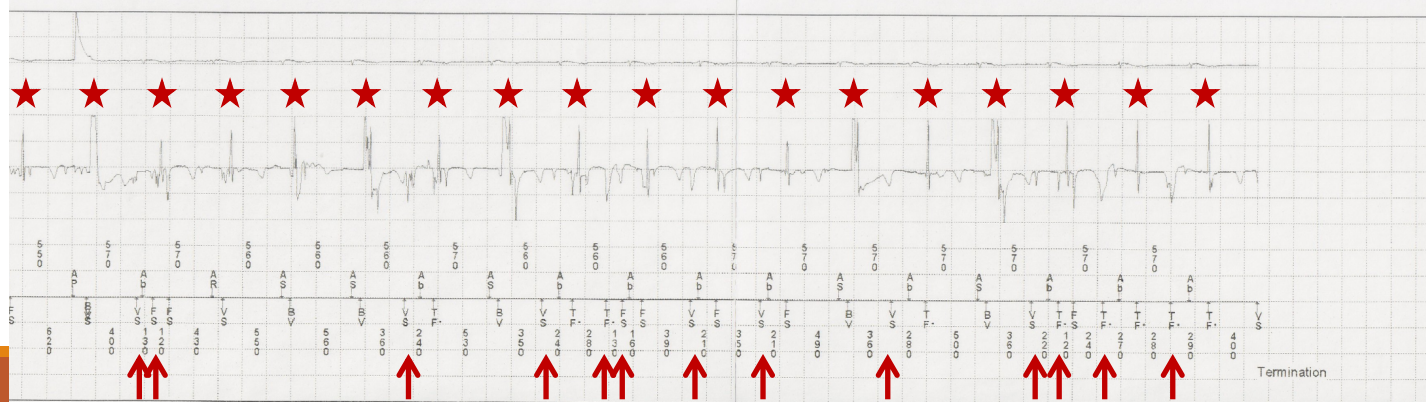
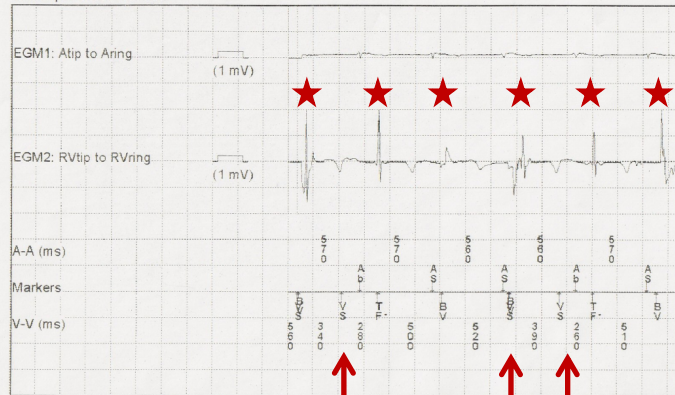


Chart speed: 25.0 mm/sec



A

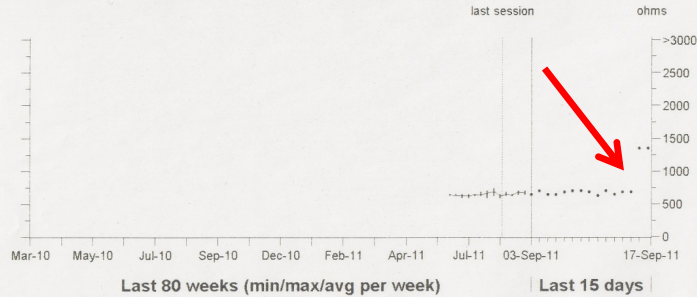
Lead Trends - RV

Page 1

Lead Model 6948

RV Impedance (bipolar)

Last Measured 1311 ohms

**B**

Lead Trends - RV

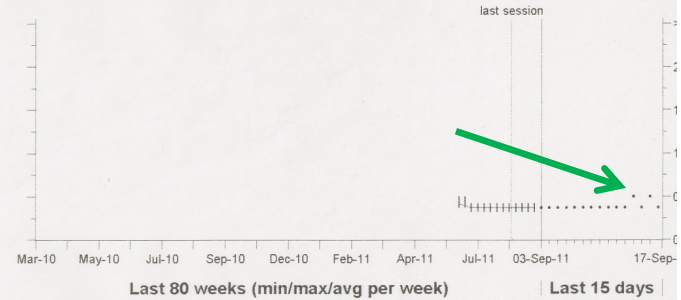
Page 2

RV Threshold

Capture Adaptive
Last Measured 0.375 V @ 0.40 ms 17-Sep-2011

Amplitude 1.50 V
Pulse Width 0.40 ms

V @ 0.40

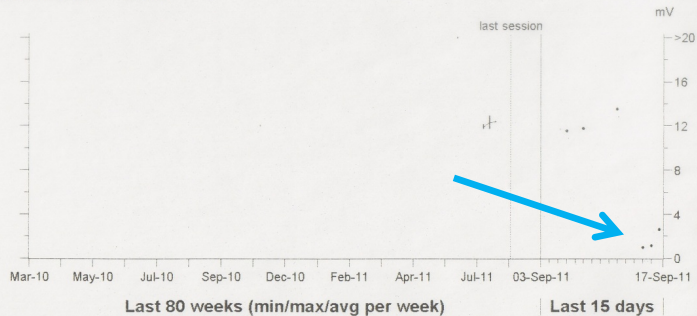
**C**

Lead Trends - RV

Page 3

R-Wave Amplitude

Sensitivity 0.30 mV
Last Measured 2.6 mV

**D**

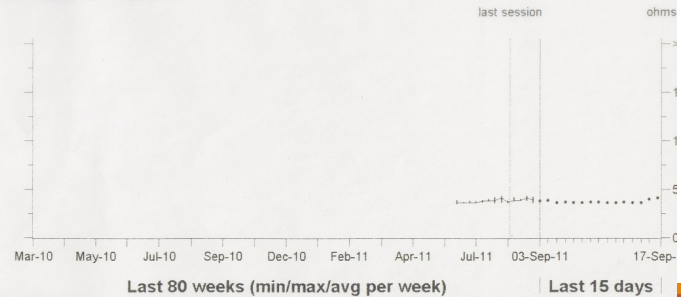
Lead Trends - RV

Page 4

Lead Model 6948

RV Defib Impedance

Last Measured 38 ohms



Date of Visit: 17-Sep-2011 07:32:55
9995 Software Version 7.3
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Date of Visit: 17-Sep-2011 07:32:55
9995 Software Version 7.3
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Olgu 4

72 yaşı, kadın

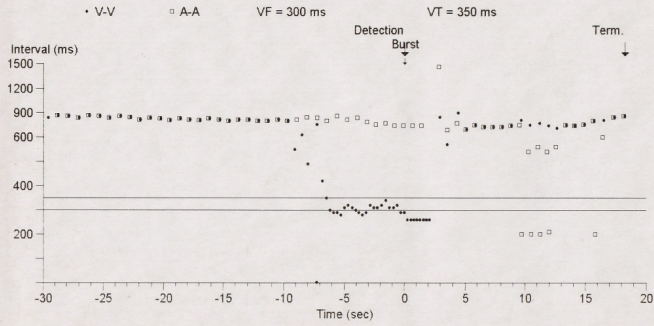
Sekonder korunma ICD

Çarpıntı şikayeti ile geliyor

Treated VT/VF Episode #4

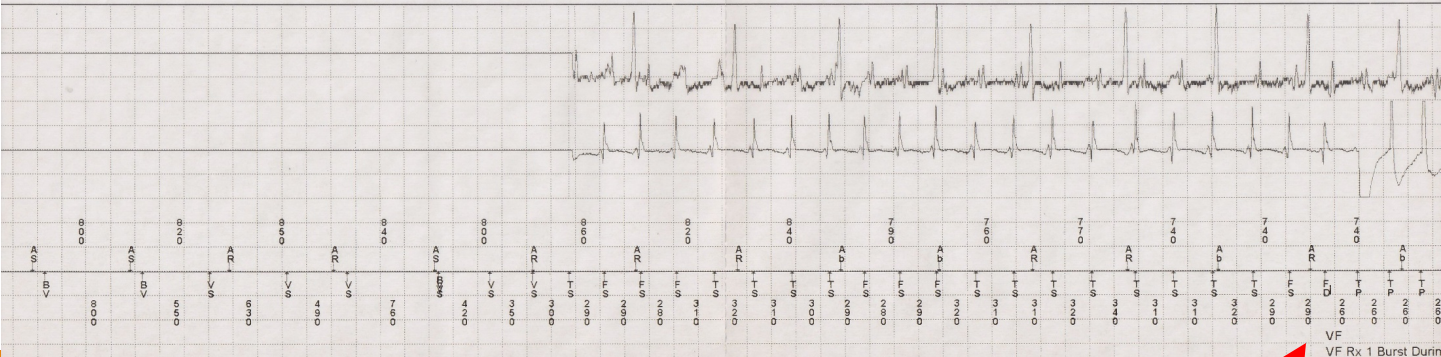
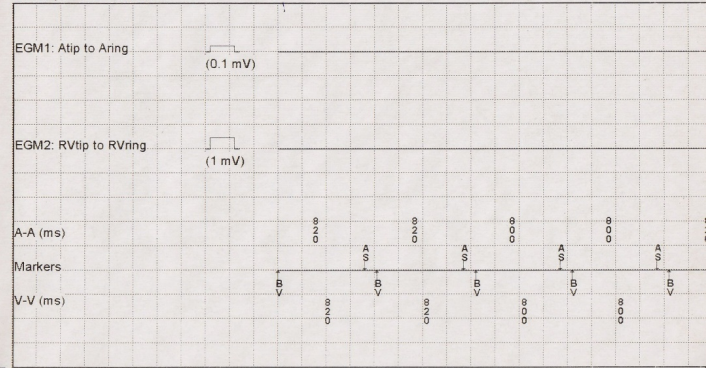
Page 1

Type	ATP Seq	Shocks	Success	ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm A/V
VF	1		Yes	4	13-Jan-2013	19:50	:18	80/200

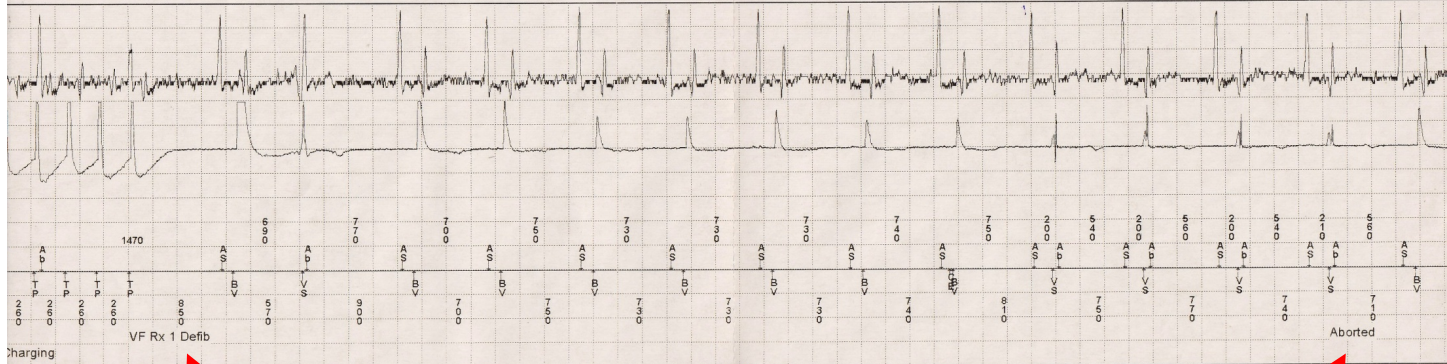


Treated VT/VF Episode #4

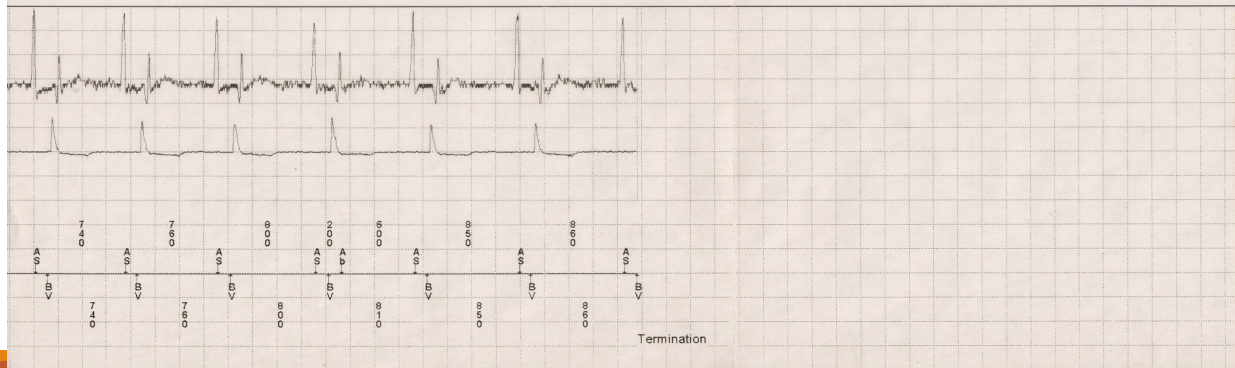
Episode #4 - VF
Chart speed: 25.0 mm/sec



VF Rx 1 Burst



Date of Visit: 06-Mar-2013 09:56:22
9995 Software Version 7.4
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Olgu 5

67 yař erkek

Primer korunma ICD

řok ile geliyor

Episode #171: 14-May-2011 01:58:02

Episode Summary

Initial Type VT (spontaneous)
 Duration 25 sec
 V. Max Rate ---
 V. Median 214 bpm (280 ms)
 V. Stability 10 ms - 30 ms
 Activity at onset Rest, Sensor = 67 bpm
 Last Therapy VF Rx1: Defib, Successful
 Episode accelerated to VF.

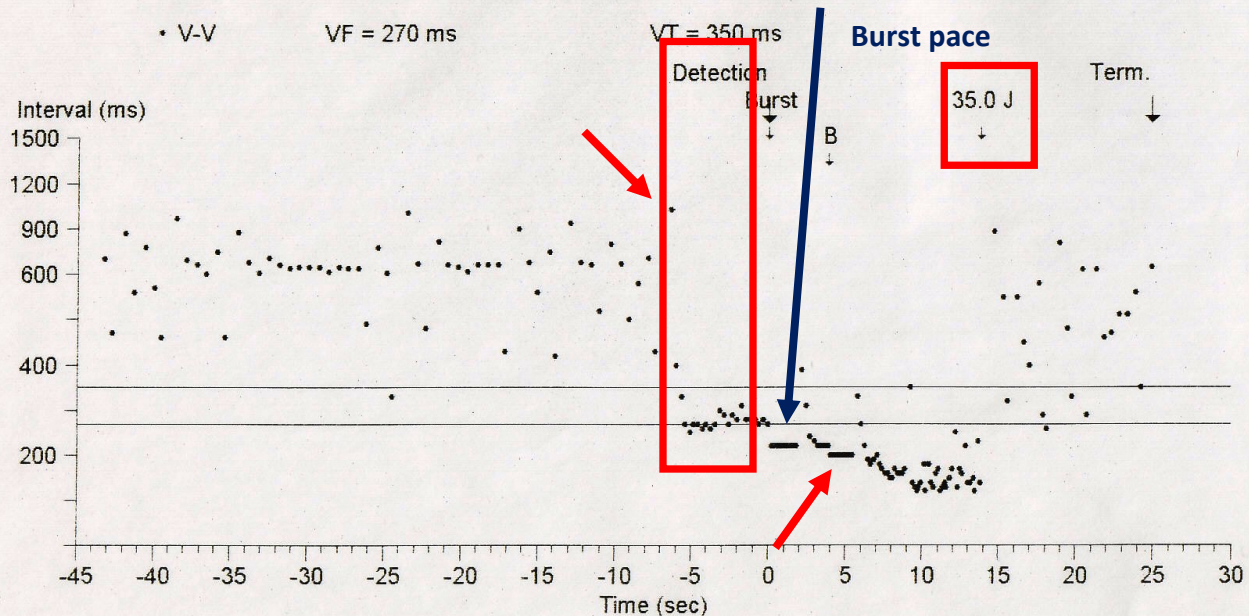
**Initial VT/VF Detection
 Withheld By**

Onset

Therapies	Delivered	Charge	Ohms	Energy
VT Rx 1 Burst	Seq 1			
VF Rx 1 Burst	Before Charging			
VF Rx 1 Defib	35.0 J	6.19 sec	48 ohms	0.0 - 35 J
Termination				

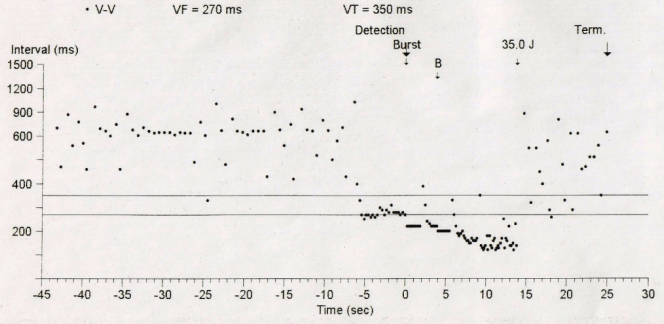
Treated VT/VF Episode #171

Type	ATP Seq	Shocks	Success	ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm V
VT	2	35J	Yes	171	14-May-2011	01:58	:25	222



Treated VT/VF Episode #171

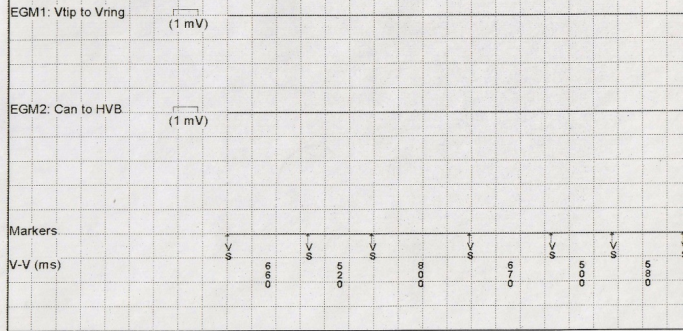
Type	ATP Seq	Shocks	Success	ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm
VT	2	35J	Yes	171	14-May-2011	01:58	:25	222



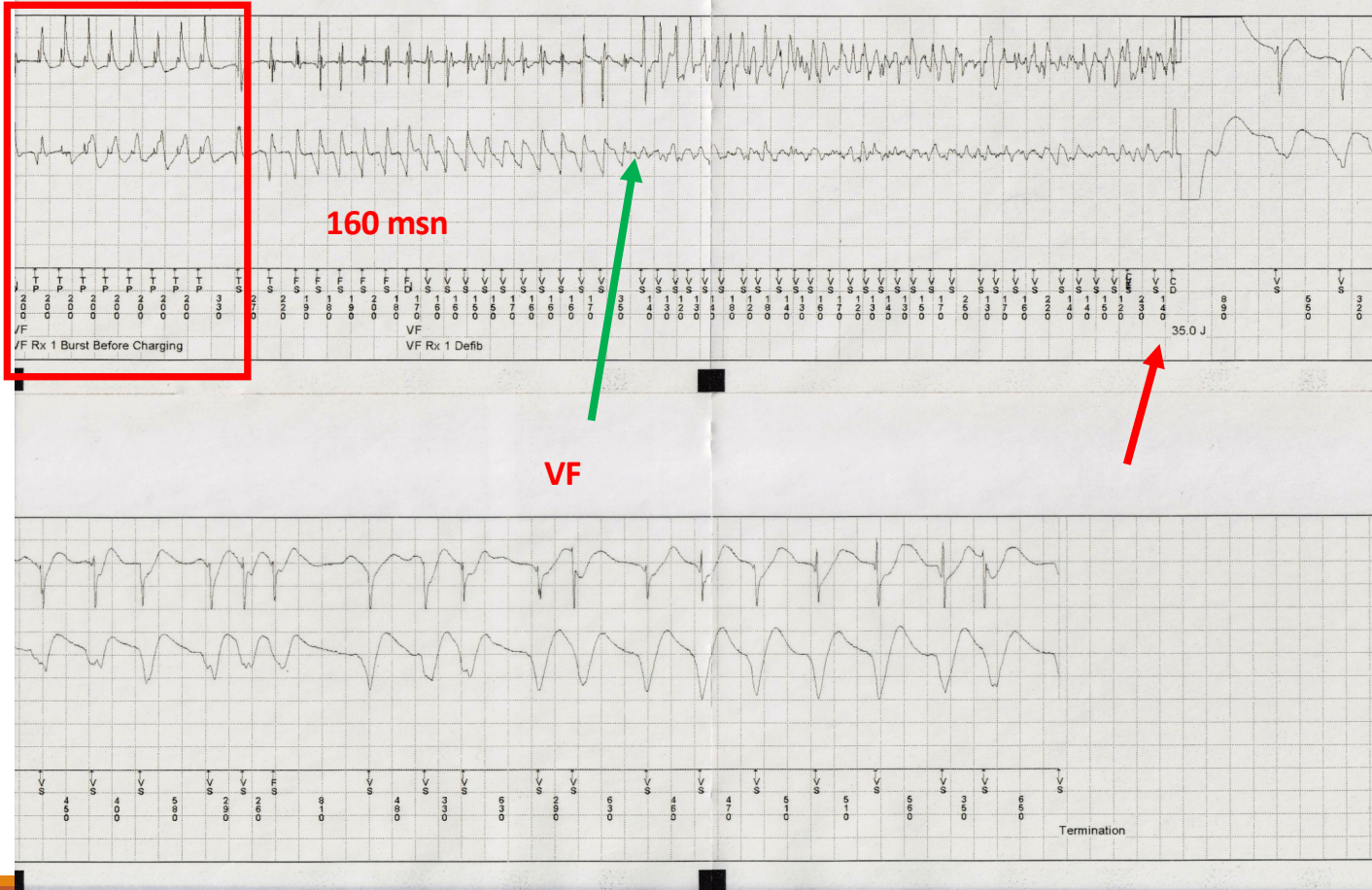
Treated VT/VF Episode #171

Episode #171 - VT

Chart speed: 25.0 mm/sec



VF zonu şarj öncesi ATP



Olgu 6

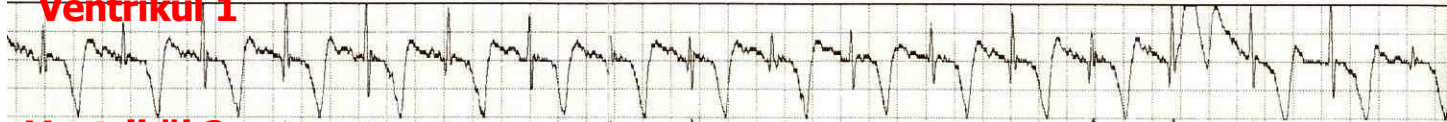
67 yař, erkek hasta

DKMP + VT

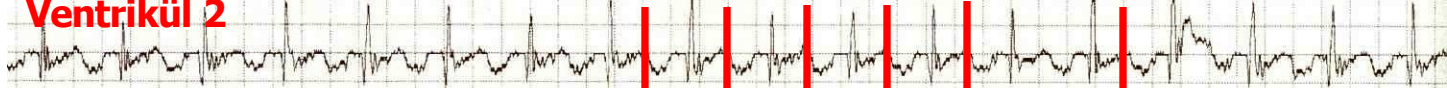
Medtronic VVIR ICD

řok nedeniyle bařvuruyor

Ventrikül 1



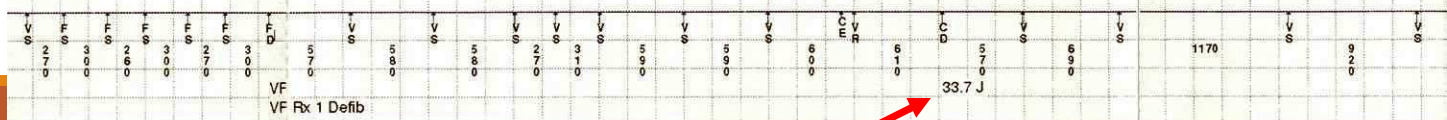
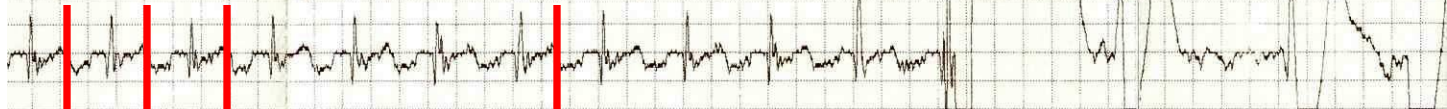
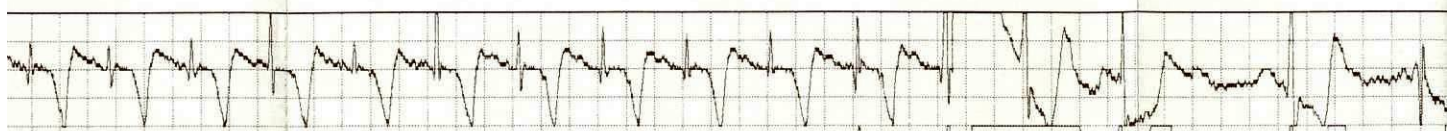
Ventrikül 2



Marker



VF
VF Rx 1 Defib



VF
VF Rx 1 Defib

33.7 J

Olgu 7

65 yař, kadın

CRT-ICD

Rutin kontrole geliyor

Treated VT/VF Episode #12

Page 1

Episode #12: 05-Feb-2012 10:22:28

Episode Summary

Initial Type FVT, via combined count (spontaneous)
 Duration 8 sec
 AV Max Rate Unknown/—
 V. Median 194 bpm (310 ms)
 Activity at onset Active, Sensor = 90 bpm
 Last Therapy FVT Rx1: Burst, Successful

Initial VT/VF Detection
 Withheld By
 None

Therapies Delivered Charge Ohms Energy

FVT Rx 1 Burst Seq 1

Termination

Parameter Settings Initial Redetect V. Interval (Rate)

VF On 18/24 12/16 310 ms (194 bpm)
 FVT via VF 280 ms (214 bpm)
 VT On 16 12 360 ms (167 bpm)

Treated VT/VF Episode #12

Page 2

Parameter Settings Initial Redetect V. Interval (Rate)

Monitor Off 20

PR Logic

AF/Afl On
 Sinus Tach On
 Other 1:1 SVTs Off
 SVT V. Limit 280 ms

Other Enhancements

Stability 40 ms
 Onset On (81%)
 High Rate Timeout Off

EGM Source Range Sensitivity

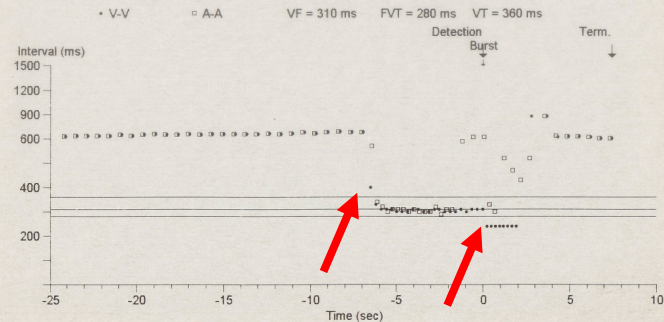
EGM1 Atp to Aring +/- 8 mV Atrial 0.3 mV
 EGM2 RVtip to RVring +/- 8 mV RV 0.3 mV

Date of Visit: 17-Feb-2012 09:35:36
 9995 Software Version 7.4
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Treated VT/VF Episode #12

Page 1

Type	ATP Seq	Shocks	Success	ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm A/V
FVT	1	Yes			12 05-Feb-2012	10:22	:08	133/200



Episode #12 - FVT
Chart speed: 25.0 mm/sec

EGM1: Atip to Aring



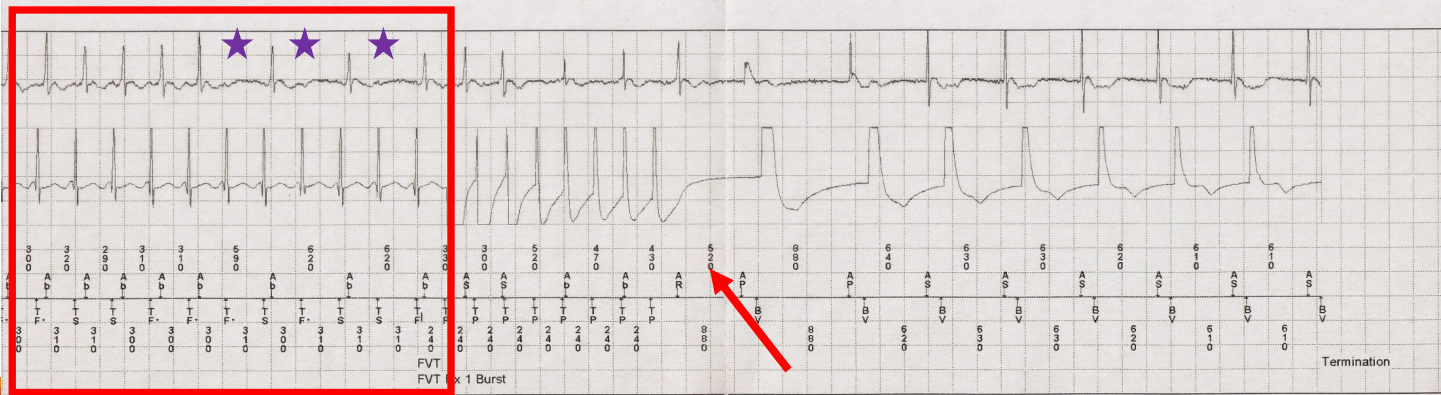
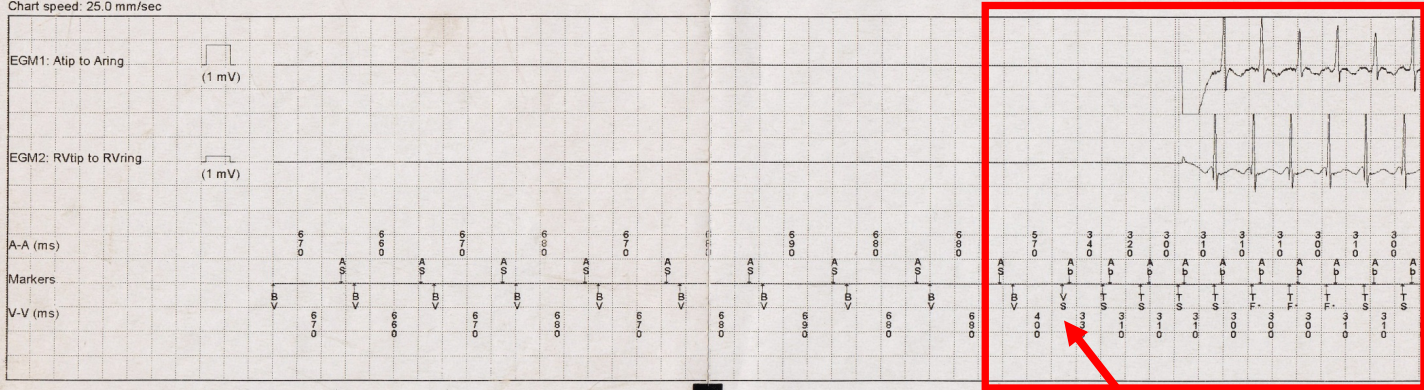
EGM2: RVtip to RVring



A-A (ms)

Markers

V-V (ms)



Olgu 8

71 yař, erkek, iskemik KMP, KY LBBB

CRT-D

řok nedeniyle kontrol

Episode Summary

Type VF
 A. Median Cycle 110 ms
 V. Median Cycle 130 ms
 V. Average Cycle 150 ms
 Last Therapy VF Rx 1 - Defib, Successful
 VT/VF Duration 14 sec

Initial VT/VF Detection

Withheld By
 None

Device was in Mode Switch prior to detection.

Therapy Sequence

One or more therapies aborted due to inability to confirm VT/VF or synchronize a CV therapy.

VF Rx 1 Defib	Energy	35.0 J	Aborted
	Charge Time	3.53 sec	

VF Rx 1 Defib	Energy	17.9 - 35.0 J
	Charge Time	4.10 sec
	Waveform	Biphasic
	Pathway	AX>B
	Delivered Energy	35.2 J
	Impedance	42 ohms

Episode Termination

Parameter Settings

	Enable	Initial	Redetect	V Interval (Rate)
VF	On	12/16	9/12	300 ms (200 bpm)
FVT	via VF			220 ms (273 bpm)
VT	On	16	12	340 ms (176 bpm)

PR Logic

AFib/AF Flutter On
 Sinus Tach On
 Other 1:1 SVTs Off
 SVT Limit 320 ms

Other Enhancements

Stability Off

Additional Settings

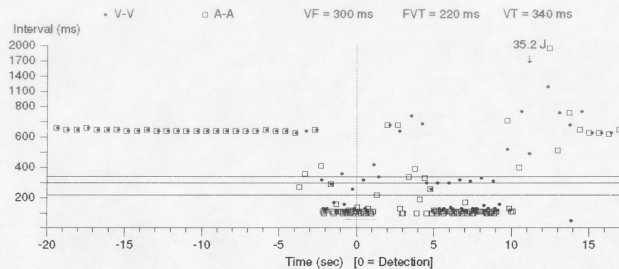
1:1 VT-ST Boundary 50%
 High Rate Timeout Off

Sensitivity

Atrial 0.3 mV
 Ventricular 0.3 mV

	EGM 1	EGM 2
EGM Source	Atip to Aring	RVtip to RVring
EGM Range	+/- 8 mV	+/- 8 mV

ID#	Date/Time	Type	V. Cycle	Last Rx	Success	Duration
6	Oct 28 10:43:19	VF	150 ms	VF Rx 1	Yes	14 sec



VT/VF Episode #6 Report

Episode #6 - VF

Chart speed: 25.0 mm/sec

