

CIED in Inherited Arrhythmia

경북대학교 조용근
choyk@knu.ac.kr

The Korean Society of Cardiology COI Disclosure

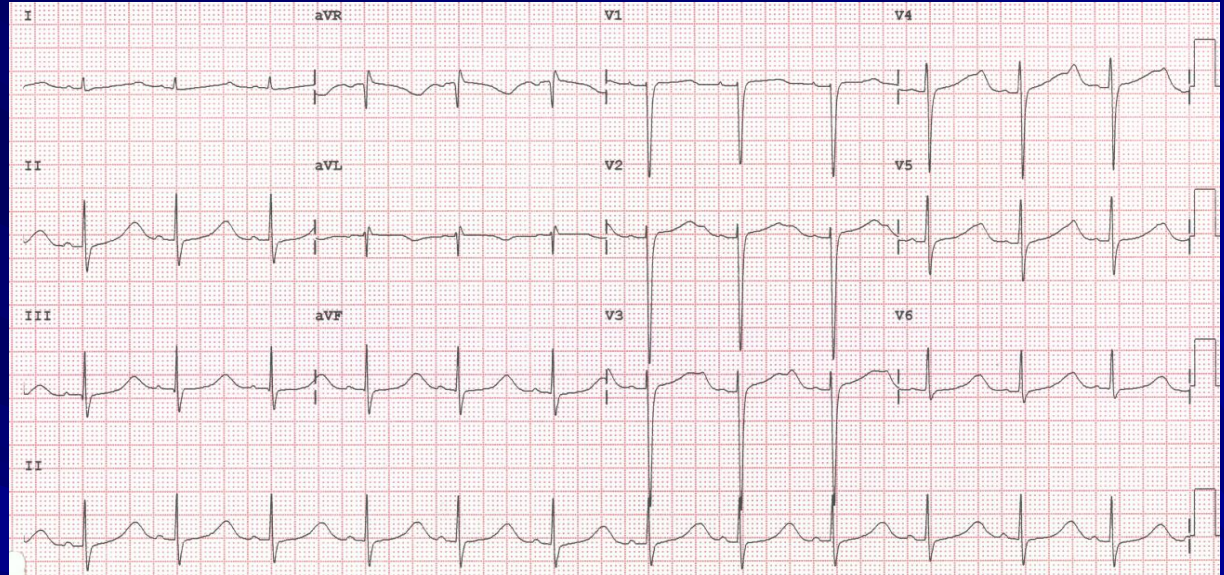
Yongkeun Cho

The authors have no financial conflicts of interest to disclose concerning the presentation



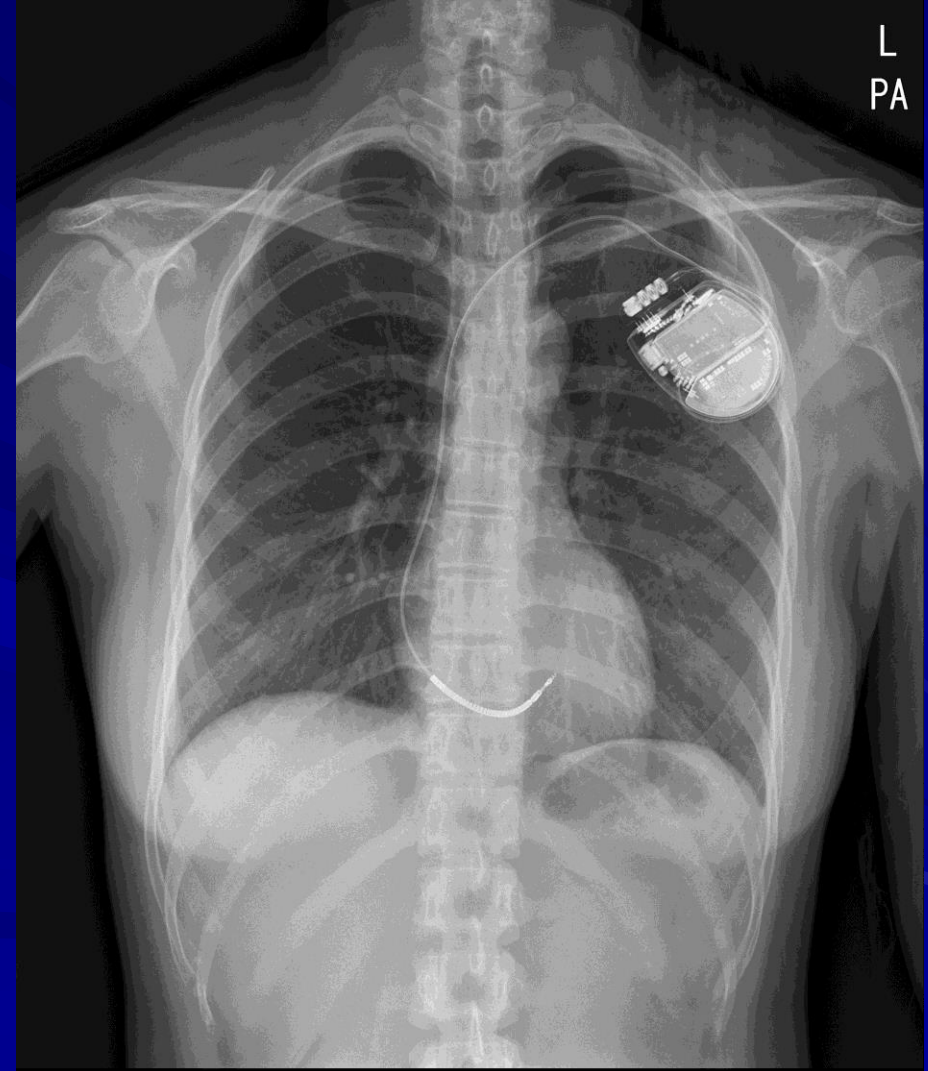
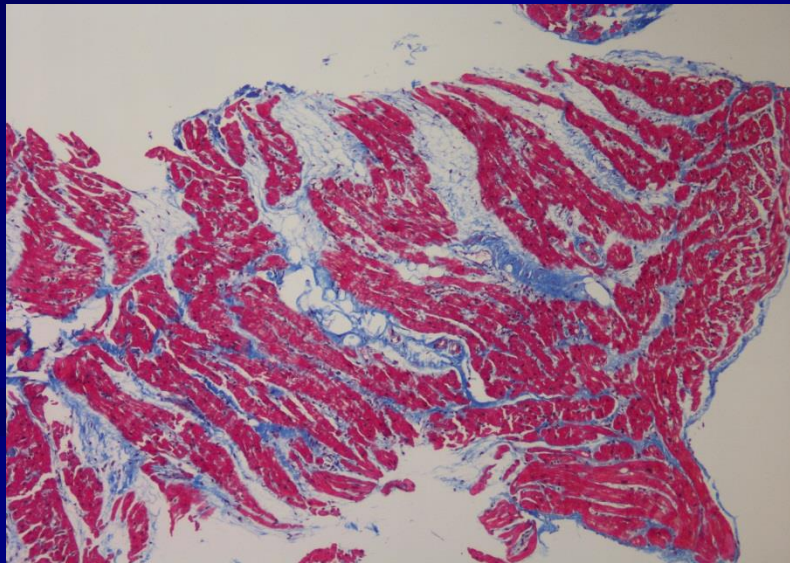
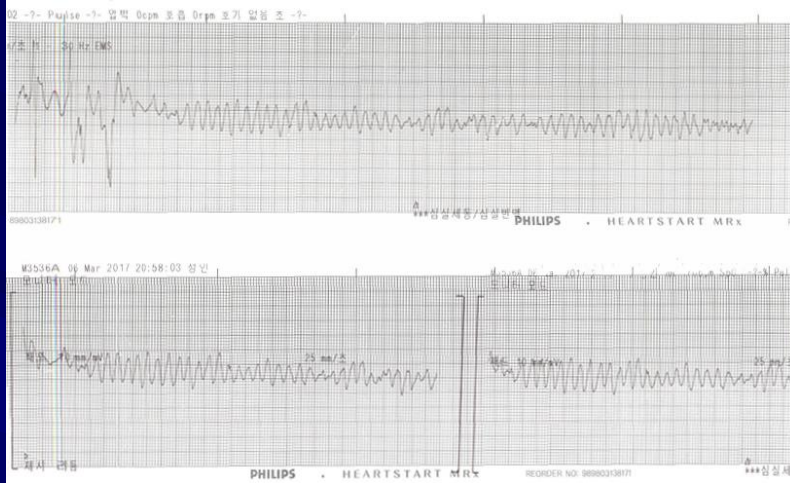
2017 Annual Spring Scientific Conference of the KSC
in conjunction with KHRS, KSIC, KSE, and KSoLA

ICD implantation in 24-years old lady with LQTS



- Inappropriate shocks
- Lead-related complications
- Vascular occlusion or stenosis
- Device replacement
- Infection
- Psychological adjustment
- Cosmetic problem
- Social discrimination

ICD implantation in 30-years old lady with ARVC



Ambiguous recommendations

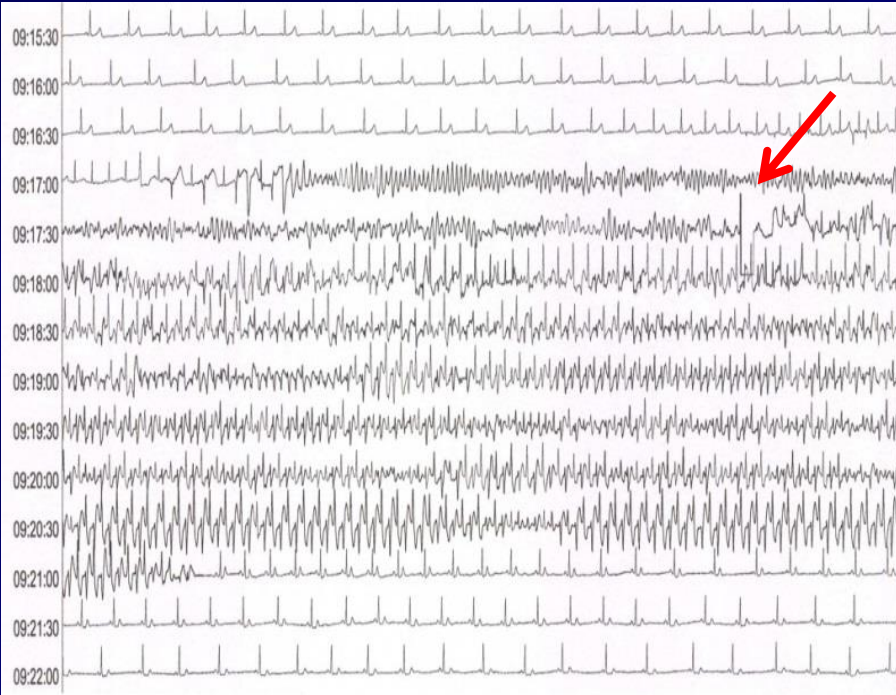
Priori, HR 2013;10:1932-63

Class	Recommendations in LQTS
I	ICD implantation is recommended in patients with a diagnosis of LQTS who are survivors of a cardiac arrest.
IIa	ICD implantation can be useful in patients with a diagnosis of LQTS who experience recurrent syncopal events while on β - blocker therapy.
III	Except under special circumstances, ICD implantation is not indicated in asymptomatic LQTS patients who have not been tried on β -blocker therapy.

Class	Recommendations in Brugada syndrome
I	ICD implantation is recommended in patients with a diagnosis of BrS who: a. Are survivors of a cardiac arrest and/or b. Have documented spontaneous sustained VT with or without syncope.
IIa	ICD implantation can be useful in patients with a spontaneous diagnostic type I ECG who have a history of syncope judged to be likely caused by ventricular arrhythmias.
IIb	ICD implantation may be considered in patients with a diagnosis of BrS who develop VF during PES (inducible patients).
III	ICD implantation is not indicated in asymptomatic BrS patients with a drug-induced type I ECG and on the basis of a family history of SCD alone.

ICD may not terminate ventricular tachyarrhythmias

CPVT LQTS



Device: Evera XT VR DVBB2D4
Serial Number: BWJ602635S

Date of Visit: 10-Feb-2017 15:55:05
SW016 Software Version 8.1 (5.1)
Copyright © Medtronic, Inc. 2012

Arrhythmia Episode List

Page 1

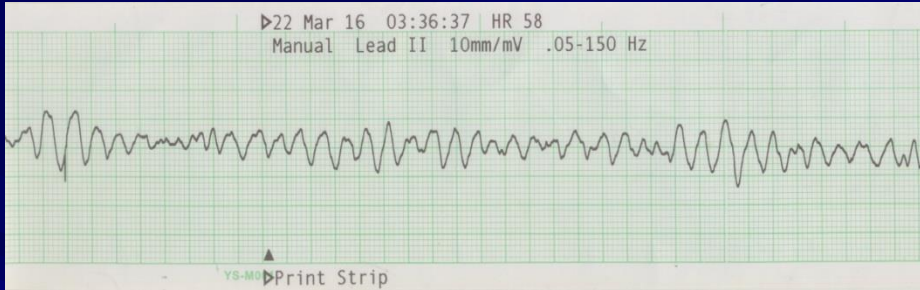
Arrhythmia Episode List: 29-Dec-2016 15:17:14 to 10-Feb-2017 15:55:05
Only specified episodes shown below.

Type	ATP Seq	Shocks	Success	ID#	Date	Time hh:mm	Duration hh:mm:ss	Avg bpm V
VF	0	35J	Yes	8	10-Feb-2017	09:50	:15	240
VF	0	35J	Yes	7	10-Feb-2017	09:50	:16	231
VF	1	35J	Yes	6	10-Feb-2017	09:49	:18	240
VF	1	35J	Yes	5	10-Feb-2017	09:49	:16	231
VF	0	35J	Yes	4	10-Feb-2017	09:48	:15	250
VF	0	35J	Yes	3	10-Feb-2017	09:47	:32	273

----- Last Programmer Session 29-Dec-2016 -----

(Data prior to last session has not been interrogated.)

Oculostenotic reflex(?) in the EP field

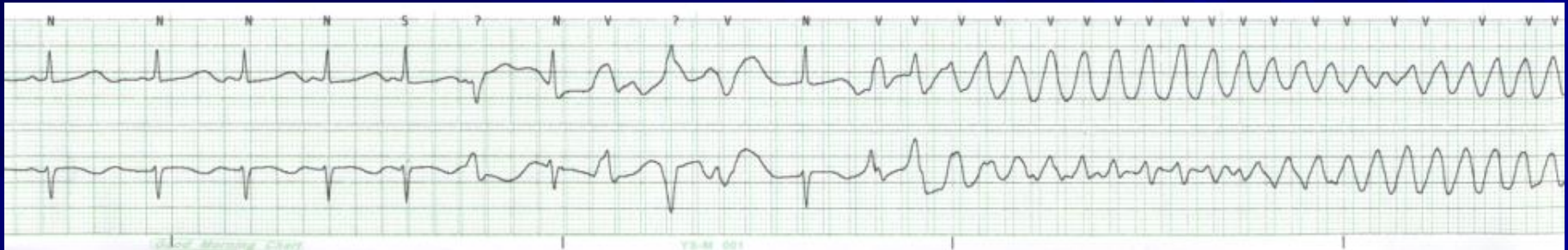


We have many therapeutic options

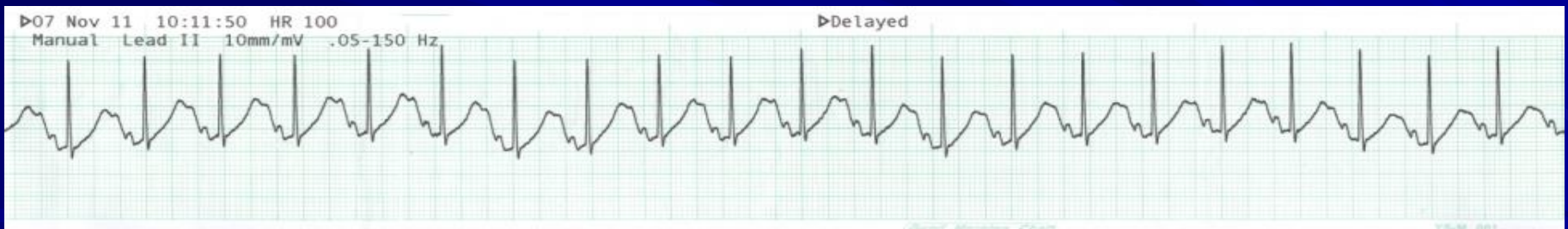


Effect of cardiac sympathectomy in 28-years old lady with LQTS

■ Before sympathectomy

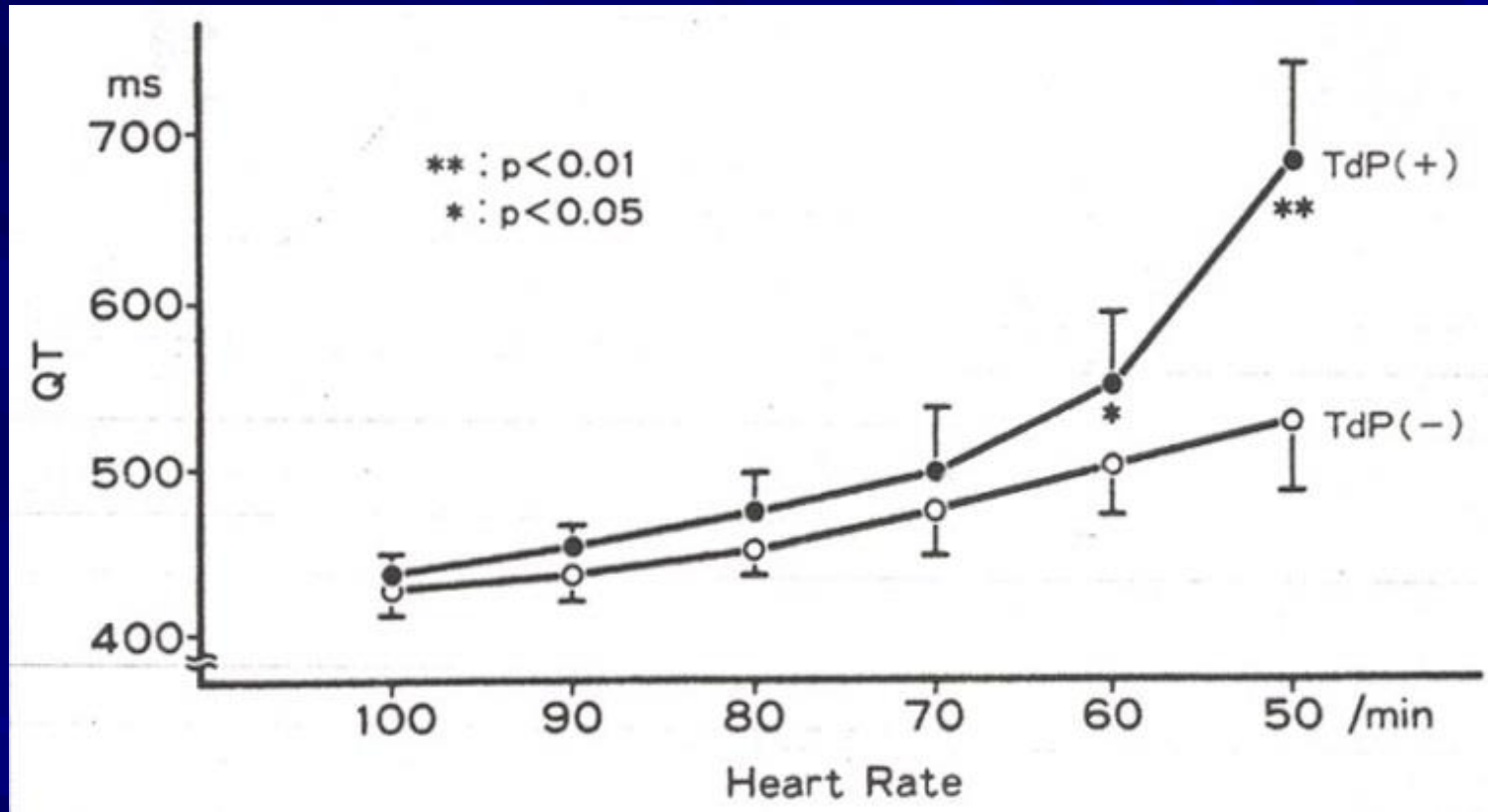


■ After sympathectomy

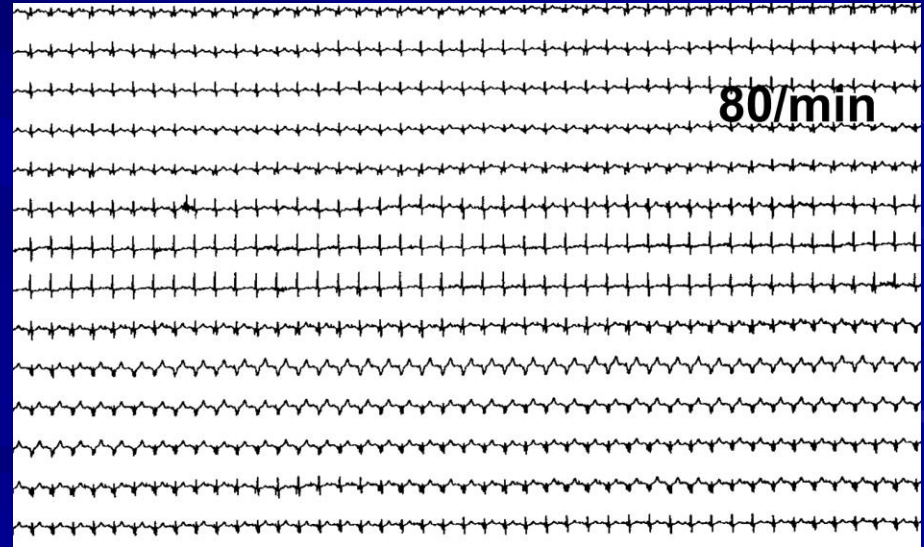
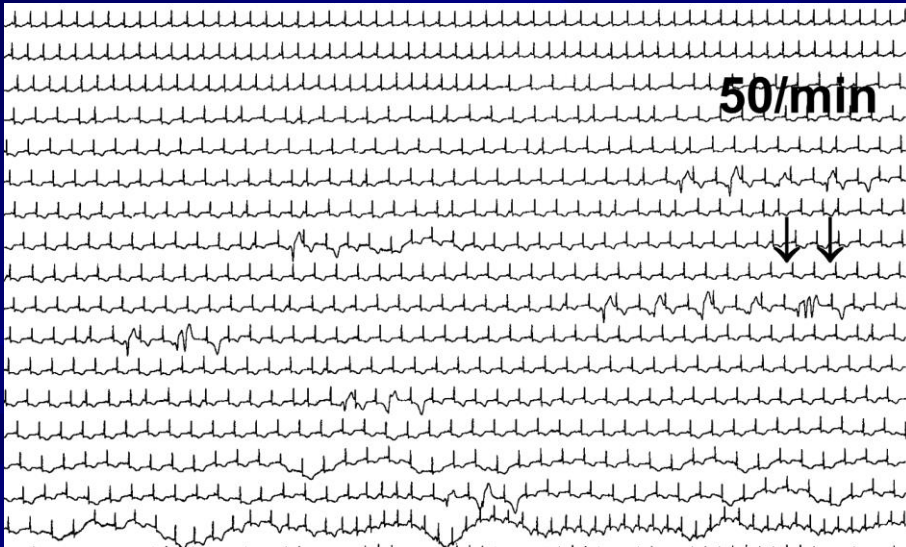
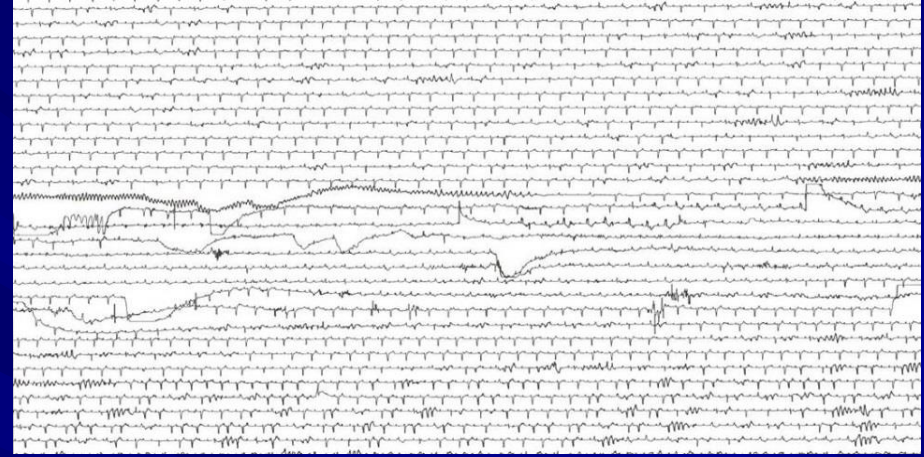
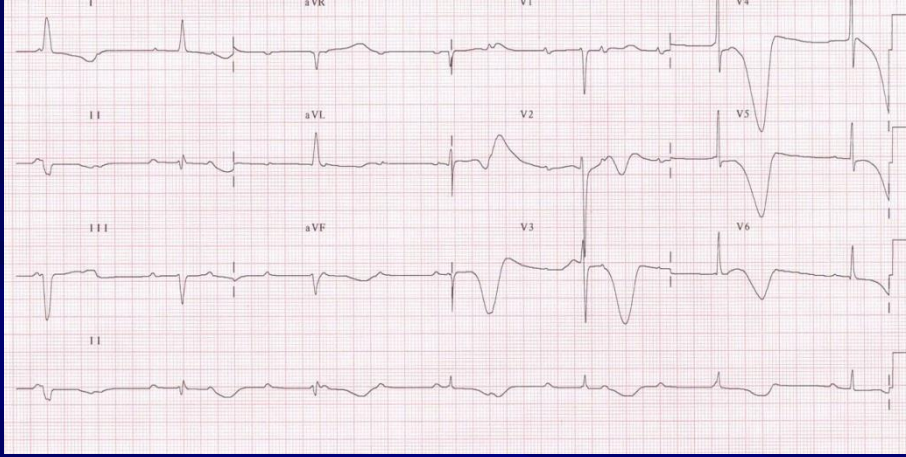


Bradycardia-induced QT prolongation in patients with complete AV block with/without TdPs

(Kurita, Am J Cardiol 1992;6:628-33)



AV block and Torsades de Pointes



Conclusion

- Think over again before implanting a device to, otherwise young and active, patients with hereditary arrhythmia. Development of complications during life-long follow-up is inevitable.
- Implant a simple device.