

Supplementary material

Tajstra M, Blamek S, Niedziela JT, et al. Patients with cardiac implantable electronic devices undergoing radiotherapy in Poland. Expert opinion of the Heart Rhythm Section of the Polish Cardiac Society and the Polish Society of Radiation Oncology. Kardiol Pol. 2019; 77: 1106-1116. doi:10.33963/KP.15063

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Patient's name and surname: _____ PESEL: _____

Date of examination: ___ / ___ / _____

CONSULTATION:

FIRST	DURING RT	AFTER RT
	Total dose:	
	Fraction no:	

DEVICE DATA*:

TYPE OF DEVICE	PM	SR	DR	CRT-P
	ICD	VR	DR	DX
	CRT-D	3 ELECTRODES	2 ELECTRODES	
MANUFACTURER	Medtronic / Vitatron / NayaMed, Biotronik, St Jude/Abbott, Boston Scientific, Sorin, Other: _____			
IMPLANTATION DATE	_____			
INDICATIONS FOR IMPLANTATION	_____			
PACEMAKER DEPENDENT	YES		NO	
SCD PREVENTION (APPLIES TO ICD/CRT-D)	PRIMARY		SECONDARY	

PROGRAMMING THE DEVICE*:

STYMLATION MODE	AAI	AAIR	VVI	VVIR	VOO	OVO	VDD
	DDD	DDDR	DDI	DDIR	DOO	ODO	
LOWER RATE OF STIMULATION	_____ /MIN						
MAXIMUM RATE OF STIMULATION	_____ /MIN						

DEVICE PARAMETERS:

	Frakcja	RA	RV	LV
Sensing [mV]	before			
	after			
Pacing threshold [V@ms]	before	@	@	@
	after	@	@	@
Impedance [Ohm]	before		HV:	
	after		HV:	
Impulse amplitude [V@ms]	before	@	@	@
	after	@	@	@
Stimulation percentage [%]				

* Mark appropriate

BATTERY (REMAINING STATUS AND/OR VOLTAGE)	years /	V /	%
CHARGING TIME (APPLIES TO ICD/CRT-D) [SEK] AND DATE			

RADIOTHERAPY DATA*:

Type of radiotherapy	RADICAL	PALLIATIVE
Irradiated organ		
Distance from the edge of the beam (cm)		
Total dose (Gy)		
Fraction dose (Gy)		
Dose to device (Gy)	<5Gy	>5 Gy
Beam energy (MV)	< 10 MV	>10 MV

CONCLUSIONS:

Radiotherapy-related risk: _____ LOW _____ MEDIUM _____ HIGH

Radiotherapy contraindicated: _____ YES _____ NO

Did CIED dysfunction or adverse effects occur during RT? _____ YES _____ NO

Comments:

RECOMMENDATIONS*:

1. Audio-visual contact with the patient during irradiation is necessary.
2. Recommended monitoring of ECG during irradiation and presence of an external cardioverter-defibrillator with external stimulation function.
3. Control every _____ week(s) during radiotherapy.
4. Radiotherapy REQUIRES / DOES NOT REQUIRE the presence of a cardiologist during radiotherapy.
5. It is recommended to tape the magnet over the device during radiation, monitor ECG recording, and have a cardioverter-defibrillator in the external room (in the absence of a cardiologist).
6. Control of the device at the completion of radiotherapy, then after 1, 3 and 6 months.

Next control date: _____ / _____ / _____

Figure 1 A recommended form for cardiac implantable electronic device checkups before, during, and after radiotherapy

Abbreviations: CRT-D, cardiac resynchronization therapy-defibrillator; CRT-P, cardiac resynchronization therapy-pacemaker; DR, dual chamber; ECG, electrocardiography; ICD, implantable cardioverter-defibrillator; PM, pacemaker; RT, radiotherapy; SR, single chamber; VR, single chamber