Dual chamber and atrial tachyarrhythmias adverse events study

Submission date 13/12/2003	Recruitment status No longer recruiting	 Prospectively registered [X] Protocol
Registration date 16/01/2004	Overall study status Completed	[_] Statistical analysis plan [X] Results
Last Edited 21/03/2016	Condition category Circulatory System	Individual participant data

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

46014

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number NCT00157820

Secondary identifying numbers DATAS

Study information

Scientific Title

Dual chamber and Atrial Tachyarrhythmias Adverse events Study

Acronym

DATAS

Study objectives

To analyse the ability of dual chamber implantable cardioverter defibrillator (DC ICD) (dual chamber [DDED] defibrillator) to reduce clinically significant adverse events compared with single chamber implantable cardioverter defibrillator (SC ICD) in a non-selected population with conventional indications for implantable cardioverter defibrillator (ICD) implantation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Documented approval of the investigational plan by the Institutional Review Board (IRB) or Ethics Committee (EC) affiliated with the study centre is required for starting the study.

Study design Randomised controlled trial

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s)

Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Tachyarrythmias, automatic implantable cardioverter defibrilator (ICD)

Interventions

Interventions: Analyse the ability of DDED to reduce clinically significant adverse events as compared to SC ICD (VVEV) in a non selected population with conventional indication of ICD implantation. Three arms: two of them (SC simulated and DC true) cross-over, and the third (SC true) parallels the other two. A 1-month wash out period after the cross-over is included to avoid influence of the remodeling associated with pacing mode.

Patients will be followed-up at 1, 4, 8, 9, 13 and 17 months. At enrolment, 8 and 17 months, the quality of life questionnaires, a 6-minute walk test and echo parameters will be recorded, as well as reevaluation of the cardiovascular history.

Intervention Type

Device

Primary outcome measure

To determine whether use of DDED ICD results in a significant decrease in the number of clinically significant adverse events (CSAE) as follows:

1. All-cause mortality

2. Invasive intervention, hospitalisation (greater than 24 hours) or prolongation of hospitalisation due to cardiovascular cause

- 3. Inappropriate shocks (two or more episodes with inappropriate shocks)
- 4. Sustained symptomatic atrial tachyarrhythmias that:
- 4.1. Require urgent termination, or
- 4.2. Last more than 48 hours leading to therapeutic intervention

Secondary outcome measures

- 1. Number of each of the components of the CSAE
- 2. Arrhythmia related:
- 2.1. Atrial tachyarrhythmia
- 2.2. Frequency and burden
- 2.3. Ventricular tachyarrhythmia frequency and burden number of appropriate shocks
- 2.4. Number of inappropriate shocks
- 2.5. Need for reprogramming
- 2.6. Need for medication/radiofrequency ablation (RFA) for arrhythmia control
- 2.7. Pacemaker syndrome
- 2.8. Development of dual chamber pacing indication
- 3. Cardiovascular related:
- 3.1. New York Heart Association (NYHA) functional class
- 3.2. Exercise capacity
- 3.3. Left ventricular ejection fraction (LVEF)
- 3.4. Reduction of medication (diuretics)
- 4. Quality of life:
- 4.1. Evaluated by the 36-item Short Form Health Survey (SF-36)
- 4.2. Minnesota living test, with heart failure and Symptom Checklist instruments

Overall study start date

01/11/2000

Completion date

01/04/2005

Eligibility

Key inclusion criteria

Meet Class I implantation criteria for single chamber implantable cardioverter defibrillator according to guidelines

Participant type(s)

Patient

Age group Not Specified

Sex

Not Specified

Target number of participants

360

Key exclusion criteria

1. Permanent atrial fibrillation

- 2. Non structural heart disease
- 3. Patient meets implantation criteria for dual-chamber pacing (symptomatic sinus node disease,
- all 2nd atrioventricular (AV) block [except asymptomatic Mobitz I] and all 3rd degree AV block)
- 4. Previous system implanted (ICD or pacemaker)
- 5. Mechanical right heart valve

6. Medical conditions that would preclude the testing required by the protocol, or limit study participation

7. Unwilling or unable to cooperate or give written informed consent, or the patient is a minor and legal guardians refuse to give informed consent

- 8. Inaccessible for follow-up at the study centre
- 9. Biventricular stimulation or re-synchronisation

10. Enrolled or planning to enrol in other clinical trials during the clinical study

Date of first enrolment

01/11/2000

Date of final enrolment

01/04/2005

Locations

Countries of recruitment

Germany

Israel

Italy

Portugal

Spain

United Kingdom

Study participating centre Av. Tres Cruces s/n Valencia Spain 46014

Sponsor information

Organisation Medtronic Inc. (USA)

Sponsor details

-Minneapolis United States of America +1 (0)55432-3576

Sponsor type Industry

Website http://www.medtronic.com/

ROR https://ror.org/00grd1h17

Funder(s)

Funder type Industry

Funder Name Medtronic

Alternative Name(s) Medtronic Inc.

Funding Body Type Private sector organisation

Funding Body Subtype For-profit companies (industry) **Location** United States of America

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Basic results</u>				No	No
Protocol article	Protocol	01/03/2004		Yes	No
Results article	Results	01/05/2008		Yes	No