Management of Atrial fibriLLation INcluding tailoring of anticoagulation in patients from primary care - ALL-IN

Published: 01-08-2015
Last updated: 15-05-2024

To evaluate whether integral AF treatment in primary care is non-inferior in terms of reducing all-cause mortality (primary outcome) and specific cardiac mortality and hospitalization and non-cardiac hospitalization (secondary outcomes), as compared...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Cardiac arrhythmias
Study type	Interventional

Summary

ID

NL-OMON44028

Source
ToetsingOnline

Brief title
ALL-IN

Condition

- Cardiac arrhythmias

Synonym
abnormal heart rhythm, a-fib

Research involving
Human

Sponsors and support

Primary sponsor: Isala Klinieken Zwolle
Source(s) of monetary or material Support: De zorg interventie wordt gefinancieerd door een experimentele dbc. Het wetenschappelijk onderzoek wordt gefinancierd door de

Stichting Achmea Gezondheidszorg (SAG) en de Hein Hogerzeil Stichting.

Intervention

Keyword: anticoagulation, atrial fibrillation, integrated care, primary care

Outcome measures

Primary outcome

Main study parameter/endpoint:

The primary outcome for this study is all-cause mortality during the study duration of 24 months.

Secondary outcome

Secondary endpoints are cardiovascular death and cardiovascular hospitalization, non-cardiac hospitalization, Major Cardiac Adverse Events (MACE, defined as myocardial infarction, acute heart failure, stroke and major bleeding), quality of life, and cost-effectiveness.

At the end of the study, an independent and blinded adjudication committee will adjudicate each hospitalization and death presumed to be related to the intervention, to assess the underlying causes. A cost-effectiveness analysis will be performed from the societal perspective. Actual health care expenses will be calculated from data in the electronic patient files (for example from data on hospitalisation) and will be used together with the QALYs to calculate the incremental cost-effectiveness ratio (ICER). Differences in costs result

from hospitalization, from medical visits and diagnostic procedures, from treatment of stroke and thrombosis and bleeding complications, and from productivity losses associated with cardiovascular or thrombotic events and bleeding complications. The time horizon used for the economic evaluation will be equal to the study period, i.e. a follow-up period of 24 months after entrance in the study.

Study description

Background summary

Atrial fibrillation (AF) is the most common cardiac arrhythmia with a prevalence of 1-2% with rates increasing with age. The majority (about 70%) of these AF patients is aged 65 years and over, with about 20% even aged above 85 years. Managing these elderly patients with AF is complex, requiring an integral management and partnerships between primary and secondary care, as well thrombosis services. It is complex for two important reasons.
First, ischemic stroke is the most important complication in these patients. Anticoagulation - either a vitamin K antagonist (VKA) or a novel oral anticoagulant (NOAC) - is highly effective to reduce this stroke risk, but is also known for the inherent bleeding complications. Thus, careful tailoring anticoagulation treatment is needed in individual patients based on an individualized risk of developing an ischemic stroke as well the patients* tolerance and adherence to anticoagulants use. AF patients are at high risk of hospital admissions, bleeding, and strokes are both related to AF. It has been hypothesized that at least part of these hospital admissions are preventable, given that current care implies that multiple health professionals all are only responsible for a part of patient*s treatment.
Second, AF is part of a broader cardiovascular disease spectrum. As such, most elderly AF patients have co-morbidities: e.g. congestive heart failure, hypertension, and ischemic heart disease, and also non-cardiovascular diseases, such as diabetes, COPD, cognitive- or renal impairment. Thus, besides stroke prevention in AF, this multi-morbidity determines the treatment (goals) and reasons for hospital referral and admissions in (often) frail older patients with AF.
Although for more than a decade integral disease management already exists with nurses supervised by GPs for patients with diabetes type 2, hypertension, coronary artery disease, and stroke - all with good results. Such structured care performed by Practice Nurses (PN) in primary care for patients with AF is

currently non-existent.
The hypothesis of this study proposal is whether an integral AF management in primary care - including case-management for anticoagulation as well as appropriate attention given to all cardiac and non-cardiac co-morbidities - improves patient care for elderly AF patients, as compared to usual care.
The research question is:
Will integral AF management - focusing on optimizing anticoagulation and optimizing attention for co-morbidity in AF - in a primary care setting reduce all-cause deaths and hospitalizations (and thus healthcare costs) in elderly AF patients (aged 65+), as compared to usual care?

Study objective

To evaluate whether integral AF treatment in primary care is non-inferior in terms of reducing all-cause mortality (primary outcome) and specific cardiac mortality and hospitalization and non-cardiac hospitalization (secondary outcomes), as compared to usual (fragmented) care.

Integral AF management is defined as
• Case-management of tailored anticoagulant management: INR measurements performed by practice nurses in primary care for those patients prescribed VKA, or quarterly check-ups in patients treated with NOAC, emphasizing treatment compliance. Anticoagulation management thus is performed in primary care, in close collaboration with cardiologists and the (local) Thrombosis Service.
• Adequate care for AF-related comorbidities and poly-pharmacy by trained practice nurses and general practitioners.
• Easy-access to cardiologists care and a thrombosis expertise centre for general practitioners where needed for complex AF cases, or in case referral is needed to secondary care. All AF patients still currently cared for in secondary care are referred back to primary care where appropriate and possible (depending on national and international guidelines).

Study design

This is a prospective randomized pragmatic trial in elderly patients who are treated for AF, performed in primary care.

Intervention

The intervention under study in this proposal is aimed at participating primary care practices. All AF patients not having one of the aforementioned exclusion criteria and registered within this practice are the target group. At the start of the project (before randomization) the general practitioner and practice nurse of each practice will determine the number of AF patients potentially eligible for this study, according to the in- and exclusion criteria. These patients are defined as the study patients. Next, after randomization, each

practice is visited to validate the list of study patients and to facilitate optimizing treatment with anticoagulation, according to the CHA2DS2-VASc score. The CHA2DS2-VASc score (cardiac failure, hypertension, age>=75 (doubled), diabetes, stroke (doubled) - vascular disease, age 65-74 and sex category (female)) is advocated to estimate the risk of stroke in AF patients and subsequently drives the need for (possible) anticoagulation: no anticoagulation at a CHA2DS2-VASc score of 0 or 1, and prescription of VKA or a NOAC in those with a score of 2 or more. Hereto, a list is made of all women aged 65 years or over and all men aged 75 years or over (CHA2DS2-VASc score of 2) who do not receive anticoagulation yet, as well as a list of all men aged between 65 and 75 years. The general practitioner is asked to check the indication for anticoagulation and to consider starting anticoagulant treatment (i.e. VKA or a NOAC) if the CHA2DS2-VASc score is 2 or more. This list is given to all participating general practitioners. Also, all general practitioners are offered the possibility to consider starting a NOAC in patients with a VKA, according to local guidance on NOAC treatment, in close collaboration with cardiologists. Nevertheless, the decision to change anticoagulation treatment is left to the discretion of the treating general practitioner and/or cardiologist.
When a primary care practice is randomised for the intervention, the investigational treatment in this study - integral AF management - will be performed by the practice nurse (PN), supervised by the general practitioner. Integral AF management encompasses a) case-management of anticoagulation in primary care, b) chronic care for AF and its related comorbidities, and c) availability of an easy-access consultation possibility by cardiologists and thrombosis experts if needed.
Integral AF management is explained in more detail below.

A: Case-management of anticoagulation in primary care: Study patients in the intervention group treated with a VKA are offered tailored anticoagulation monitoring by the PN with INR measurements in the primary care practice (using point-of-care INR measuring) and dosage advice is received using the online portal of the Thrombosis Service. If needed, home-visits are made. The PN provides important information for the Thrombosis Service to take into account when calculating the dosage advice, based on the actual health status, recent medication or treatment changes. If patients have anticoagulation questions or problems, the PN can determine the actual INR and give treatment advice or consult the Expert Center of the TS, whatever is deemed appropriate given the clinical context of the INR derailment. In addition, to ensure the safety of this transferring of INR measurements from the Thrombosis Service to primary care, the PN will be trained and peer supervision will be organized, guided by the Expert Center. For patients treated with a NOAC, the NOAC therapy will be part of the quarterly check-ups mentioned in section B.
B: Chronic AF care including assessment and proper attention to all AF-related co-morbidity: Quarterly, the PN and once yearly the general practitioner evaluates the patients* health condition and treatment (including compliance) for AF according to the guidelines of the Dutch General Practitioners (NHG

Standaard Atriumfibrilleren). The NHG Standaard CardioVasculair Risico Management -CVRM protocol is followed to optimize treatment of other cardiovascular diseases (hypertension, heart failure, status after MI and stroke, lipid lowering if needed, etc.) and the NHG Standaard Diabetes Mellitus is followed if patients have diabetes. The PN coordinates the health programs if other caregivers are involved to warrant integral care.
C: Easy access consultation: If needed, the participating general practitioner will have access to an easy to use consultation possibility for either the cardiologist or a thrombosis expert, through telephone or e-mail. If needed, prompt referral to secondary care is applied. Patients who used to have regular check-ups for atrial fibrillation by the cardiologist will visit their cardiologist for a closing visit, after which the patient will be referred back to primary care. Regular check-ups by the cardiologist for cardiac conditions other than atrial fibrillation will be continued when necessary and appropriate. These appointments will be complementary to the integral AF management provided by the practice nurse and general practitioner.

Study burden and risks

It is expected that this study will result in a lower mortality, bleeding- and thrombotic occurrences. Yet, similar or perhaps potentially higher compared to those treated with usual care, patients undergoing the intervention are at risk of these outcomes. We anticipate this potential higher risk to be minimal however. Finally, patients need to fill in *quality of life* questionnaires.

Contacts

Public
Isala Klinieken Zwolle

Dokter van Heesweg 2
Zwolle 8025 AB
NL
Scientific
Isala Klinieken Zwolle

Dokter van Heesweg 2
Zwolle 8025 AB
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

patients with atrial fibrillation of whom the GPs will provide integral management of AF and 65 years and over.

Exclusion criteria

-unwilling to provide informed consent by the general practitioner
-life expectancy less than 3 months
-have an internal ICD or or a Cardiac Resynchronisation Therapy (CRT) device
-had a cardiac resynchronization treatment, cardiac ablation or cardiac surgery less than 3 months prior to inclusion, or one of these procedures planned
-heart valve surgery in the past
-a rheumatic mitral valve stenosis
-pulmonary vein isolation in the past, or planned
-if they are legally incapable of providing informed consent for the intervention program
-if they participate in another randomized trial about AF

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Health services research

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	29-01-2016
Enrollment:	1000
Type:	Actual

Ethics review

Approved WMO Date:	01-08-2015
Application type:	First submission
Review commission:	METC Isala Klinieken (Zwolle)
Approved WMO Date:	18-01-2016
Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)
Approved WMO Date:	23-05-2016
Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)
Approved WMO Date:	05-07-2016
Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)
Approved WMO Date:	01-02-2018
Application type:	Amendment
Review commission:	METC Isala Klinieken (Zwolle)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

ID: 23738
Source: Nationaal Trial Register
Title:

In other registers

Register	ID
CCMO	NL53065.075.15
OMON	NL-OMON23738