Project generated by:	Contribution 1mission-1million an Initiative of Boehringer Ingelheim published in https://www.heartofstroke.com/all-applications
Country:	Germany
Titel of the project:	Catching ATrial Fibrillation Early After Stroke and TIA (CATFEAST) study

Project details

Roland Veltkamp

Department of Neurology, University Heidelberg

Award amount: €100,000

Stroke prevention in AF is particularly effective in high-risk patients with stroke/TIA. However, intermittent AF is frequently not detected in these patients because a structured diagnostic pathway does not exist. We develop a stepwise, comprehensive, interdisciplinary approach for detecting intermittent AF early after stroke/TIA and evaluate its impact on management.

BACKGROUND: Although ischemic stroke can be effectively prevented by long-term anticoagulation in AF, adequate therapy is only started in part of the patients. An important reason for this shortcoming is that about 30-50 % of patients suffer from intermittent AF which can easily escape diagnosis by standard tests (12-channel ECG, 24hour Holter ECG). Because AF patients with recent stroke or transient ischemic attack (TIA) have the highest risk to suffer a future stroke, measures to improve the detection in these patients are of utmost importance. Currently, there is no standard diagnostic pathway for evaluation of patients with recent TIA/stroke for the presence of intermittent AF. Consequently, the extent of diagnostic work-up for intermittent AF after stroke/TIA varies substantially depending on local practice and on whether patients are hospitalized. Prolonged recording of the ECG improves the detection rate of AF. In hospitalized stroke patients, continuous ECG-monitor recordings are useful. In outpatients prolonged Holter ECG is a complementary but logistically challenging approach. For both in- and outpatients, a structured stepwise approach for clinical and technical assessment and re-evaluation for an indication for anticoagulation is not available. AIM: The main goal of our project is to establish and evaluate a structured, stepwise diagnostic pathway to optimize the detection of AF after stroke/TIA which should serve as a model for interdisciplinary evaluation. METHODS: The project integrates repeated clinical and technical assessments at defined time points after stroke/TIA. It takes into account that patients with stroke/TIA may be followed in different scenarios including hospitalization or outpatient evaluation. The spectrum of diagnostic tools will encompass repeated interviews of patients and physicians, non-invasive cutting edge diagnostic technologies, and escalate to invasive monitoring in selected patients. Accordingly, diagnostic work-up will be divided into 3-4 phases: (1) Phase 1: “Presentation” (day 0/1) (2) Phase 2: “Stroke-Unit-Monitoring” (3) Phase 3: “Early outpatient phase”: (including 5 day Holter-ECG monitoring using a patient-friendly patch- ECG plus automatic AF-detection software (supplied by Apoplextech.) (4) Phase 4: “Late outpatient phase”: Event recorder (including implanted) Study Setting: Consecutive, single centre study. Patients will be enrolled after presentation in our neurological emergency room (ER) or after referral. More than 90 % of patients with stroke/TIA (> 1500 patients/year) within our catchment area of 850.000 inhabitants present primarily to our ER. Based on recent data from the consecutive Heidelberg Stroke registry, the prevalence of AF is estimated to be >30 % in this patient population. Additionally, an established network of general practitioners, hospitals, and cardiologists will refer patients to us. Main study outcome parameters: (1) Percentage of stroke patients receiving structured diagnostic work-up (2) Detection rate of intermittent AF (by scenarios, diagnostic tools, phases) (3) Impact on preventive management (e.g. anticoagulation) Inclusion criteria: Ischemic stroke or TIA; informed consent Exclusion criteria: Sustained AF, lack of therapeutic consequences after diagnosis of AF Projected enrolment: eligible 1700 patients, estimated actual enrolment 75%: 1275 patients Total study duration: 24 months Schedule: Patient enrolment 14 months, final follow-up after 6 months; 2 months for data analysis

Audience

Type

- AF Patients
- Healthcare professionals
- Patienten mit Schlaganfall oder TIA

Location

Germany, Europe