

Available online at www.sciencerepository.org

Science Repository



Supplementary Materials

Adherence to the Canadian Cardiovascular Society Atrial Fibrillation Guidelines by Family Medicine Groups in Quebec: the I-FACILITER project

Thao Huynh^{1*}, Adam Bobrowski², Martine Montigny³, Vincent Ta¹, Danielle Dion⁴, Robert Breton⁵, Melinda Barbaras⁵, Miguel Angel Barrero⁶, Mark Roper⁷, Martin Cadorette⁸, Pauline Couture⁹ and Isabelle Greiss¹⁰

¹Division of Cardiology, Department of Medicine, McGill Health University Center

²Faculty of Medicine, University of Toronto

³Division of Cardiology, Cite de Santé de Laval, University of Montreal

⁴Division of Cardiology, Centre de santé et de services sociaux de Beauce, Beauce

⁵Division of Cardiology, Centre de santé et de service sociaux de Chicoutimi

⁶Division of Cardiology, Centre Hospitalier Affilié Universitaire Régional de Trois-Rivières

⁷Division of Primary Care, Department of Family medicine, McGill University Health Centre

⁸GMF Clinique de Médecine familiale des Récollets, Trois-Rivières

⁹Regional Department of Family Medicine, Centre Intégré de santé et des services sociaux de Laval

¹⁰Division of Cardiology, Centre Hospitalier de l'Université de Montréal

ARTICLE INFO

Article history:

Received: 3 June, 2019

Accepted: 18 June, 2019

Published: 2 July, 2019

Keywords:

Anticoagulation

atrial fibrillation

family medicine

non-vitamin K oral anticoagulants

stroke

ABSTRACT

Background: The Canadian Cardiovascular Society (CCS) Atrial Fibrillation (AF) guidelines 2014 recommends oral anticoagulation (OAC) for patients with CHADS₂ ≥1 or age ≥65 years and non-vitamin K oral anticoagulants (NOAC)s as the preferred medications. We aimed to evaluate adherence to these guidelines by family group practices (FMG) in Quebec.

Methods and results: We completed a cross-sectional evaluation at 15 FMGs. There were 431 patients with non-valvular AF: mean age of 77.3±10.4 years and 52.9% were females. CHADS₂ and HAS-BLED were infrequently documented (47% and 7%, respectively). Most patients (93%) were appropriately anticoagulated (96% for both patients with CHADS₂ ≥1 and patients with age ≥65 years). Sixty-five percent of patients were anticoagulated with warfarin, 28% with NOACs and 21% of patients received a combination of oral anticoagulant (OAC)s and aspirin.

Every decade increase in age was associated with 49% increase in odds of adherence to the guidelines and 26% decrease in odds of NOACs's use. Each point increase in HAS-BLED was associated with 51% decrease in odds of adherence to the guidelines and 36% decrease in odds of NOACs's use. No patient with HAS-BLED of ≥5 received NOAC. Heart failure was associated with a 61% decrease in odds of NOACs's use.

Conclusion: AF management by FMGs could be improved by 1) increasing NOACs uptake, 2) decreasing the combination of OAC with ASA and 3) increasing documentation of stroke and bleeding risks.

© 2019 Thao Huynh by Science Repository. All rights reserved.

*Correspondence to: Dr. Thao Huynh MD, MSc, PhD, Montreal General Hospital, 1650 avenue Cedar, room E-5200 Montreal, Quebec, Canada; H3G-1A4; Tel: 514-934-1934 extension 44649, fax 514-934-8569; E-mail: thao.huynhthanh@mcgill.ca

Appendix 1. List of participating family group practices

- FMG clinique familiale de Beauceville. Coop Santé Robert-Cliche - BEAUCE
- FMG clinique familiale de Beauce - BEAUCE
- UMF de Chicoutimi – CHICOUTIMI
- FMG Saguenay – SAGUENAY
- FMG Queen Elizabeth – MONTREAL
- FMG 1851 – MONTREAL
- FMG Centre médical LAVAL
- FMG Des Boisés-Jolybourg LAVAL
- FMG Polyclinique Fabreville LAVAL
- FMG -Clinique Médicale Montreuil - LAVAL
- FMG Medi-centre Chomedey – LAVAL
- FMG Le Carrefour Medical – LAVAL
- FMG Ste-Dorothée – LAVAL
- FMG Ste-Rose – LAVAL
- FMG Des Récollets – Trois Rivières

Appendix 2

I-FACILITER CASE REPORT FORM

Eligibility of patients: All patients seen at the primary care practice with known or de novo atrial fibrillation/atrial flutter

Date of chart review _____ (date/month/year)

Site name _____

Initials of patient _____

- Male sex
- Female sex

Date of birth _____ (date/month/year)

Atrial fibrillation _____ **Atrial Flutter** _____ **Both** _____

Diagnosed since _____ (date/month/year)

Paroxysmal(transient) _____ **Permanent** _____ -

Co-morbidity(ies)	Yes	No	Unknown
Diabetes mellitus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Heart Failure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gastro-duodenal ulcer	<input type="checkbox"/> Year : _____	<input type="checkbox"/>	<input type="checkbox"/>
Kidney disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CVA/ TIA/ICT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hepatic disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Peripheral vascular disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Excessive alcohol consumption (according to chart review) ≥15 drinks per week (man) ≥10 drinks per week (woman)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Previous major haemorrhage	<input type="checkbox"/> specify : _____	<input type="checkbox"/>	<input type="checkbox"/>
Other medical problem(s), specify:			

Medication	Yes	No	Unknown
Aspirin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thienopyridines, P2Y12 inhibitor (Clopidogrel (Plavix), Ticagrelor (Brillinta), Prasugrel (Effient)) Other (such as anti-inflammatories, only if taken on a daily basis), specify: _____	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Anti-vitamines K (Warfarin (Coumadin, Synthrom))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Novel oral anticoagulants ¹ (Dabigatran (pradaxa), Rivaroxaban (xarelto), Apixaban (eliquist))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anti-arythmic drug ¹ (Dronedarone (Multaq), Amiodarone (Cordarone), Flecainide (Tambocor), Propafenone (Rythmol), Sotalol (Sotacor))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate control drug ¹ (Beta-blockers: Atenolol (Tenormin), Bisoprolol (Monacor), Metoprolol (Lopressor), Nadolol (Corgard), Propranolol (Inderal), Carvedilol (Coreg), Acebutolol (Monitan)*Sotalol (Sotacor) . OR Calcium channel blockers: Verapamil (Isoptin), Diltiazem (Cardizem, Tiazac) OR Lanoxin (Digoxin)...))	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Is the CHADS-2 score reported in the patient's file? If yes, please indicate value _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the HAS-BLED score reported in the patient's file? If yes, please indicate value _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If patient is older than 65 years old, and not anticoagulated, please specify reason for lack of anticoagulation as specified in chart.

_____ -

If no reason specified, please check this box.

If patient has CHADS-2 ≥ 1 and not anticoagulated, please specify reason for lack of anticoagulation as specified in the chart.

* There are possible other medications in these classes, if in doubt, please contact coordinating center.

If no reason specified, please check this box.

Blood pressure at the time of the documentation of the atrial fibrillation:

Heart rate at the time of the documentation of the atrial fibrillation:

Was the patient referred to a specialist for AF management and if yes, please specify type of specialist(s): yes no

- Cardiologist
- Internist
- Hematologist or anticoagulation clinic
- Other, please specify _____