Title of the Project

A PhArmacist/ RN supervised medication Titration program to achieve heart Rate/ rhythm control in Atrial Fibrillation: a retrospective chart review (PARTNER-AF)

Primary Project Advisor/Preceptor/Investigator/Co-investigators

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Clinical Question/Practice Issue

The focused clinical question in this study is to determine if those patients who have been monitored by the AFC Medication Titration Program, compared to standard of care by EP, have a difference in outcomes.

Background/Rationale

The incidence of atrial fibrillation (AF) increases exponentially with age, from 0.1% in those < 55 and to >10% in patients over age 80. It is a chronic condition that varies in its presentation of symptoms from asymptomatic to debilitating. Those with high intensity symptoms are frequently referred to electrophysiologists for consultation, treatment strategy and follow-up care. These patients are additionally supported by the VIHA Atrial Fibrillation Clinic for interdisciplinary care. One of the services offered is the Medication Titration (MT) Program administered by a pharmacist and/or cardiac nurses.

This program was introduced in June 2011. The purpose of the program was to standardize AF medication management and to achieve the goals of heart rate or rhythm control through a medication titration protocol.

Since program initiation, the AFC has enrolled 80 patients into the MT Program. We believe that patients who are enrolled in the program have facilitated access to care and as a result are able to achieve the goals of rate control/rhythm control faster than patients managed through standard EP care.

There are several medication titration programs published in the literature with respect to the management of heart failure drug, insulin and opioids. These programs have shown that pharmacists and/or nurses have successfully managed patients using protocol algorithms for drug titration. However, there are no previously published studies demonstrating that atrial fibrillation (AF) patients can achieve rate/rhythm control goals using medication titration protocols.
The AFC MT program demonstrates practice innovation for the profession of Pharmacy. The pharmacist works independently in an outpatient clinic to achieve outcome goals yet maintains a highly collaborative relationship with nursing and physician counterparts. In addition to being actively involved with patient teaching, medication counseling, and medication assessment, the pharmacist also monitors outcomes through necessary tests: lab work, ECG, Holter monitor, etc. An evaluation of the program and publication of the results will demonstrate an innovative role for pharmacists in chronic disease management.

**Patient Population/Target**

AF patients referred to EP and initiated on medications to achieve rate/rhythm control.

**Intervention**

Patients who are enrolled in the Medication Titration Program through the Atrial Fibrillation Clinic

**Comparator/comparison**

Patients who are managed by standard EP care for drug titration, case matched by the following factors: age, gender, AF classification, treatment strategy (rate/ rhythm), geographical region in VIHA.

**Primary Outcomes:**

To determine if enrollment into the Medication Titration Program impacts:

1. Time from EP consult or AFC Medication Titration Program clinic enrollment to achieving optimal Holter results and CCS-SAF score OR documented failure of prescribed enrollment medication, whichever comes first

**Secondary Outcomes:**

1. Proportion of patients who achieve optimal targets for rate/rhythm control with prescribed enrollment medication
2. ER visits and hospitalizations at 6 months and 1 year following start of enrollment medication
3. Conformity to Medication Titration Program algorithm for drug safety and efficacy for prescribed treatment at enrollment
4. Total number of EP and AFC visits (phone calls/clinic visits) from initiation of treatment strategy to documented achievement of target goals or treatment failure.

**Study Design/Methodology**

Retrospective chart review of all AFC patients prescribed rate control or antiarrythmic medications as a sole AF management strategy (i.e. no planned procedures) during EP consult. Outcomes of standard care will be determined by EP dictation notes.

Study period: June 1, 2011 – February 28, 2013

Data sources: PHSA Cardiac Services BC/ Atrial Fibrillation Clinic database, Data Warehouse, Western Cardiology Associates electrophysiologists electronic medical records, and AFC patient charts.
References:


