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Patients diagnosed with atrial fibrillation who seek cardiologist care more likely to survive first year

Specialist care associated with 32% lower death rate in AF patients, according to a new study in the Canadian Journal of Cardiology

Philadelphia, November 27, 2017 – Atrial fibrillation (AF) is growing to epidemic proportions worldwide. Investigators, hypothesizing that patients who received comprehensive cardiovascular care had a greater likelihood of survival during the first year following their initial diagnosis, found that cardiologist care was associated with a 32% lower death rate. However, views differ regarding whether this is a real effect requiring all AF patients to see a cardiologist, or an artifact of the study population. The study results are reported alongside an editorial in the *Canadian Journal of Cardiology*.

AF is a common disorder, consisting of skipped or irregular heartbeats (arrhythmias) that can lead to blood clots, stroke, heart failure, and other heart-related complications. There are an estimated 30 million cases worldwide. Untreated, AF doubles the risk of heart-related deaths and is associated with a five-fold increased risk for stroke, according to the American Heart Association.

“Variations in AF care across medical specialties are well known,” explained lead investigator Sheldon M. Singh, MD, Cardiologist at Sunnybrook Health Sciences Centre and Assistant Professor of Cardiology/Electrophysiology at Sunnybrook Health Sciences Centre, University of Toronto. “Other than stroke prevention therapy, no other therapy has been associated with improved survival in patients with AF. Heart failure and sudden death account for 35-50% of AF deaths, so we hypothesized that comprehensive cardiovascular care beyond stroke prevention may improve overall survival in AF patients.”

Investigators assessed the association between cardiologist care and all-cause mortality in new-onset AF patients by comparing data for patients aged 20-80 years with a new diagnosis of AF who saw a cardiologist within one year of diagnosis, to similar patients who did not see a cardiologist. They used population-level Institute for Clinical Evaluative Sciences databases, which contain health information on all Ontario residents and are linked to enable the creation of patient groups and long-term follow-up.

Investigators determined that one in 15 patients with new-onset AF died within a year of the diagnosis. The majority (85%) of new-onset AF patients saw a cardiologist. Patients who saw a cardiologist had more hospital visits within a year of their diagnosis than individuals who did not see a cardiologist, and cardiology care was associated with a 32% reduction in death in this population.

“Our work highlights the association between cardiology assessment and improved survival in new-onset AF patients. Our findings should stimulate further research to determine the specific components of care which may allow patients with AF to live longer. This is particularly important as access to cardiologist care is not universal,” commented Dr. Singh.

In an accompanying editorial, Stephen Wilton, MD, Assistant Professor of Cardiology at the Libin Cardiovascular Institute of Alberta in Calgary, questions whether all AF patients need to see a cardiologist. He points out that the study data do not explain how, why, and whether the 15% of patients not seen by a cardiologist were never referred, or whether they declined a referral. “The most startling finding from this study is the high rate of death in the cohort overall. Therefore, a new diagnosis of AF, while not immediately life-threatening, should be regarded as an important marker of near-term risk of cardiovascular events. This observation alone provides a potential rationale for desiring early cardiovascular specialist evaluation for these patients.”

Dr. Wilton continues, “But even if it were possible for every patient with AF to be cared for by a cardiologist, this should be unnecessary. Especially in the increasing proportion of those with AF who are asymptomatic, we can empower family physicians to perform initial investigations and initiate stroke prevention therapy. Instead of mandating that all patients with AF see a cardiologist, we should seek to promote collaborative, patient-centered models of care delivery that work within local contexts and preserve the vital role of primary care providers.”

The crucial issue is whether the lower death rate resulted from specialized cardiology care (which would require all AF patients to see a cardiology specialist at least once in consultation), or whether the relatively small subgroup of patients who never saw a cardiologist were selected for factors (e.g. greater frailty, lower levels of medical compliance, etc.) that might increase their mortality risk while decreasing the chance that they would be referred to a cardiologist. Interestingly, similar findings have been reported from an American study this year (*J Am Coll Cardiol*. 2017;70:78-86), suggesting that similar factors may be operative in different jurisdictions.

Notes for Editors

The articles are “The Relationship Between Cardiologist Care and Clinical Outcomes in Patients with New-Onset Atrial Fibrillation,” by Sheldon M. Singh, MD, Feng Qiu, MSc, Lauren Webster, MPH, Peter C. Austin, PhD, Dennis T. Ko, MD, MSc, Jack V. Tu, MD, PhD, Harindra C. Wijeysundera, MD, PhD (https://doi.org/10.1016/j.cjca.2017.10.003) and “Editorial: Do All Patients with Atrial Fibrillation Need a Cardiologist?” Stephen B. Wilton, MD (https://doi.org/10.1016/j.cjca.2017.10.014). They appear in the *Canadian Journal of Cardiology*, volume 33, issue 12 (December 2017) published by Elsevier.

The study was supported by a donation from the Tambakis family.

Full text of these articles is available to credentialed journalists upon request. Contact Eileen Leahy at +1 732-238-3628 or cjcmedia@elsevier.com to obtain copies. Journalists wishing to schedule interviews with the study authors should contact Monica Matys, Communications Advisor, Sunnybrook Health Sciences Center, at +1 416-480-6100 x 2116, +1 416-670-7249 (cell), or monica.matys@sunnybrook.ca. To reach Dr. Wilton for comment contact sbwilton@ucalgary.ca.

About the *Canadian Journal of Cardiology*

The *Canadian Journal of Cardiology* is the official journal of the Canadian Cardiovascular Society. It is a vehicle for the international dissemination of new knowledge in cardiology and cardiovascular science, particularly serving as a major venue for the results of Canadian cardiovascular research and Society guidelines. The journal publishes original reports of clinical and basic research relevant to cardiovascular medicine as well as editorials, review articles, case reports, and papers on health outcomes, policy research, ethics, medical history, and political issues affecting practice. www.onlinecjc.ca

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Editor-in-Chief Stanley Nattel, MD, is Paul-David Chair in Cardiovascular Electrophysiology and Professor of Medicine at the University of Montreal and Director of the Electrophysiology Research Program at the Montreal Heart Institute Research Center.

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