Regarding Article “Ethnic Distribution of Electrocardiographic Predictors of Atrial Fibrillation and Its Impact on Understanding the Ethnic Distribution of Ischemic Stroke in the Atherosclerosis Risk in Communities Study (ARIC)”

To the Editor:

We read with great interest the title-mentioned article published in Stroke.1 We are currently examining the prevalence and characteristics of, and risk factors for, those aged 70 years and over in the Hai District of Northern Tanzania, Africa, and this study has guided us significantly in our thinking about differences in ethnic distribution of atrial fibrillation and stroke. As part of our study, we will examine the prevalence of P wave predictors of atrial fibrillation on 12-lead ECG and validate them in this population with long-term Holter monitoring and follow-up. We will be using the same ECG predictors as described in the ARIC study, as well as P wave dispersion (maximum P wave duration − minimum P wave duration) and P wave initial force in lead V1 (when combined with P wave terminal force). There is good evidence for these measurements in predicting the occurrence of paroxysmal atrial fibrillation.2-4

With this in mind, we write to point out the minor but important errors within this report of the ARIC study. These caused us much confusion that was resolved quickly by direct contact with the lead author (Dr Soliman).

In the Methods and Table of Results 2–5, it is stated that the P wave area is measured in microvolts/milliseconds squared. We point out that this should be milliseconds rather than milliseconds squared. In addition, if the voltage was measured in microvolts and then multiplied by milliseconds, then this would give an answer in tens of thousands rather than hundreds (for example, in Table 2 on page 1206, rather than maximum P wave area for blacks being $384.2 \pm 115.2$, it would in fact be $38420 \pm 11520$ microvolts×milliseconds). We hope this letter will save others wishing to use this important article as a basis for P wave analysis from similar confusion in the future.

Matt Dewhurst, MRCP
North Tyneside General Hospital
Education Department
North Shields, UK

Phil Adams, BA, FRCP
Royal Victoria Infirmary
Newcastle-upon-Tyne, UK


© 2011 American Heart Association, Inc.

Stroke is available at http://stroke.ahajournals.org

DOI: 10.1161/STROKEAHA.110.592097
Regarding Article "Ethnic Distribution of Electrocardiographic Predictors of Atrial Fibrillation and Its Impact on Understanding the Ethnic Distribution of Ischemic Stroke in the Atherosclerosis Risk in Communities Study (ARIC)"
Matt Dewhurst and Phil Adams

Stroke. 2011;42:e19; originally published online December 16, 2010; doi: 10.1161/STROKEAHA.110.592097
Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2010 American Heart Association, Inc. All rights reserved.
Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://stroke.ahajournals.org/content/42/2/e19

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Stroke can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Stroke is online at:
http://stroke.ahajournals.org/subscriptions/