The clinical characteristics and outcomes of patients with lone atrial fibrillation at Groote Schuur Hospital

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Introduction
Atrial fibrillation (AF) is a common arrhythmia and is often difficult to manage. The classical risk factors for AF include hypertension, valvular disease, thyroid disease, cardiomyopathies, including ischaemic cardiomyopathies. When AF represents an electrophysiological phenomenon in structurally normal hearts it is termed lone AF. There are currently no studies to describe the clinical characteristics and outcomes of patients with lone AF in Africa. This study’s purpose is to describe the clinical characteristics and outcomes of Lone AF patients attending Groote Schuur Hospital (GSH).

Methods
A retrospective descriptive study in which 289 medical records of patients with AF at the GSH Cardiac Clinic were reviewed (1992–2006). Clinical data, electrocardiograms, echocardiograms and laboratory results were interrogated to exclude identifiable causes of AF. Information on clinical characteristics and outcomes was entered into a data-entry form. Baseline descriptive statistics were expressed as means and range for continuous variables and counts with percentages for categorical variables.

Results
Forty-two patients were identified as having lone AF and had a mean follow-up time of 5.8 years. Males comprised 57% (n = 24) and females 43% (n = 18). The mean age for males was 46 years with no males being older than 65 at diagnosis. The mean age of females was 62.4 years, 55% (n = 10) being less than 65 (mean age 45) at diagnosis. Fifty percent (n = 21) were white, 36% (n = 15) were mixed race, 7% (n = 3) were black and 7% (n = 3) did not have their race specified. Forty-three percent (n = 18) had a normal weight, 36% (n = 15) were overweight and 21% (n = 9) were not specified. Sixty-two percent (n = 26) had paroxysmal AF, 38% (n = 16) had chronic AF and 12% (n = 5) progressed from paroxysmal to chronic AF. Presenting complaints were palpitations (73%), dizziness (66%), dyspnoea (46%), near blackouts (41%), chest pain (22%) and fatigue (22%). The mean duration of symptoms prior to diagnosis was 7.7 years. Complications included stroke (10%) (n = 4); tachycardia-related cardiomyopathy (17%) (n = 7) and heart failure (5%) (n = 2). No mortalities were recorded. Eighty-five percent (n = 25) were on betablockers, 22% (n = 9) progressed onto amiodorone, 12% (n = 5) had radiofrequency ablations and 10% (n = 4) eventually had atrioventricular nodal ablations with permanent pacemaker insertion. Sixty-eight percent (n = 28) were on warfarin and 27% (n = 11) were on aspirin for prevention of thromboembolic complications. Seven percent (n = 3) had bleeding complications while on anticoagulation therapy.

Conclusions
Lone AF is a relatively uncommon condition with a preponderance to white, thin, middle-aged males. The symptoms of lone AF can be debilitating with associated morbidity but no mortality was recorded in our cohort. Rate control and appropriate anticoagulation are the cornerstones of patient management.