

18. Kabir AA, Whelton PK, Khan MM *et al.*, Association of symptoms of depression and obesity with hypertension: the Bogalusa Heart study. *Am J Hypertens* 2005; **19**(6): 639–645.
19. Schutte R, Schutte AE, Huisman HW, van Rooyen JM, Malan NT, Péter S, *et al.* Blood glutathione and sub-clinical atherosclerosis in African men: the SABPA study. *Am J Hypertens* 2009; **22**: 1154–1159.
20. Giuseppe M, De Backer G, Dominiczak A, *et al.* 2007 Guidelines for the management of arterial hypertension. *Eur Heart J* 2007; **28**: 1462–1532.
21. World Medical Association. Declaration of Helsinki: Ethical principles for medical research involving human subjects. World Medical Association online 2005 Available at: <http://www.wma.net/e/policy/b3.htm>. Accessed November 9, 2008.
22. Obrist PA. *Cardiovascular Psychophysiology: A Perspective*. London: Plenum Press, 1981.
23. World Health Organization 2003. The Global Physical Activity Questionnaire (GPAQ). Available at: <http://www.who.int/entity/chp/steps/resources/GPAQ.htm> Accessed: November 7, 2008.
24. Jackson G. The General Health questionnaire. *Occup Med* 2007; **57**(1): 79.
25. Stapelberg R. *Psychometric characteristics of the Cope and SACS in the Setswana-speaking South African group* (MA). Potchefstroom University, Potchefstroom. 1999: 200.
26. Goldberg DP, Gater R, Sartorius TB, *et al.* The validity of two of the GHQ in the WHO study of mental illness in general health care. *Psychol Med* 1997; **27**: 191–197.
27. Marfell-Jones M, Olds T, Stewart A, *et al.* International standards for anthropometric assessment. ISAK: International Society for the Advancement of Kinanthropometry, 2006: 58–87.
28. American College of Sports Medicine (ACSM). *Guidelines for Exercise Testing and Prescription*. 7th edn. Philadelphia: Lippincott Williams & Wilkins, 2006.
29. Heil DP. Predicting activity energy expenditure using the Actical® Activity Monitor. *Res Q Exercise Sport* 2006; **77**(1): 64–80.
30. Ang DSC, Lang CC. The prognostic value of the ECG in hypertension: where are you now? *J Hum Hypertens* 2008; **22**: 460–467.
31. Riolo SA, Nguyen TA, Greden JE, *et al.* Prevalence of depression by race/ethnicity: findings from the National Health & Nutrition Examination study III. *Am J Public Hlth* 2005; **95**(6): 998–1000.
32. Brownhill S, Wilhelm K, Barclay L, *et al.* ‘Big build’: hidden depression in men. *Aust N Z J Psychiat* 2005; **39**(10): 921–931.
33. Appels A. Mental precursors of myocardial infarction. *Br J Psychiat* 1990; **156**: 465–471.
34. Verdecchia P, Schillaci G, Borgioni C, *et al.* Prognostic values of a new electrocardiographic method for the diagnosis of left ventricular hypertrophy in essential hypertension. *J Am Coll Cardiol* 1998; **31**: 383–390.
35. Sundström J, Lind L, Arnlöv J, *et al.* Echocardiographic and echocardiographic diagnoses of left ventricular hypertrophy predict mortality independently of each other in a population of elderly men. *Circulation* 2001; **103**: 2346–2351.
36. Farmer A. Medical disorders in people with recurrent depression. *Br J Psychol* 2008; **192**: 351–355.
37. Remme WJ. The sympathetic nervous system and ischemic heart disease. *Eur Heart J* 1998; **19**(F): 62–71.
38. Reynolds RM, Walker BR, Syddall HE, *et al.* Altered control of cortisol levels and impaired cognition in human aging: implication for depression and dementia in later life. *Rev Neurosci* 1999; **10**: 117–139.
39. Gold SM, Dziobek I, Rogers K. Hypertension and hypothalamo-pituitary-adrenal axis hyperactivity affect frontal lobe integrity. *J Clin Endocrinol Metab* 2005; **90**(6): 3262–3267.
40. Rieff M, Schwartz S, Northridge M. Relationship of depressive symptoms to hypertension in a household survey in Harlem. *Psychosom Med* 2001; **63**: 711–721.
41. Dimsdale JE. Symptoms of anxiety and depression as a precursor to hypertension. *J Am Med Assoc* 1997; **277**: 574–575.
42. Jonas BS, Frank P, Ingram DD. Are symptoms of anxiety and depression risk factors for hypertension? *Arch Fam Med* 1997; **6**(1): 43–49.

Letter to the Editor

Dear Sir

In their article on long-term outcome associated with early repolarisation on electrocardiography, Tikkanen and colleagues (*N Engl J Med* 2009, 24 December)¹ refer to the generally admitted definition,^{2,3} showing a figure with both slurring and notching patterns in subjects who died from arrhythmia. This is the longest-ever published follow-up study on the topic.

It would be useful to have data on the prognostic significance of each type of repolarisation. In our yet-to-be published registry,⁴ J-point elevation that was notched rather than a slurred variant appears to be strongly related to the history of transient loss of consciousness in black Africans. However, this finding needs to be studied prospectively.

In addition to the findings that inferior lead localisations and the magnitude of the J-point elevation ≥ 0.1 mV (mostly > 0.2 mV) are stronger predictors of death from cardiac causes or arrhythmia, we want to emphasise the importance of information on the degree of malignancy of each type of early repolarisation

on risk-stratification accuracy in subjects with this common pattern in the general population.

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References

1. Tikkanen JT, Anttonen O, Junttila JM, *et al.* Long-term outcome associated with early repolarization on electrocardiography. *N Engl J Med* 2009; **361**: 2529–2537.
2. Boineau JP. The early repolarization variant – an electrocardiographic enigma with both QRS and J-STT anomalies. *J Electrocardiol* 2007; **40**(1): 3.e1–3.e10.
3. Haïssaguerre M, Derval N, Sacher F, *et al.* Sudden cardiac arrest associated with early repolarization. *N Engl J Med* 2008; **358**: 2016–2023.
4. Bonny A, Ditah I, Larrazet F, Frank R. Prevalence and significance of early repolarization pattern in Black Africans: Registry of two centers in Cameroon. Abstract, ESC 2009, Barcelona, Spain.