ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #507

1. Title:

Is Postural Change in Blood Pressure Associated with Stroke/TIA's? Abbreviated Title: Hypotension and Stroke

2. Writing Group:

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3. Timeline:

Proposal to publications committee August 25. Begin analysis within 3 months of approval of proposal.

4. Rationale:

Cerebral infarction is known to be caused by cerebral ischemia from a number of causes. An infarct may occur because of occlusion of a cerebral artery, or may occur when hypotension is superimposed on a less severely narrowed vessel. TIA's occur with less severe and/or transient ischemia. It is our hypothesis that postural change in blood pressure will be associated with symptoms of stroke, TIA's and MRI findings after controlling for other risk factors.

5. Main study questions:

- 1. Evaluate the cross-sectional association of postural change in blood pressure with the derived stroke/TIA variables controlling for other known risk factors.
- 2. In persons without symptoms of TIA's or strokes at Visit 1, does more severe postural change (i.e. the quartile with the largest drop in blood pressure to those

without drop in blood pressure predict the occurrence of symptoms at visits 2 or 3 or MRI findings of infarcts?

6. Data:

Visit 1: Ethnicity, gender, age, hypertension, diabetes, smoking, prevalent MI, BMI, LDL, antihypertensive medications, atrial fibrillation, derived stroke/TIA algorithm, change in systolic blood pressure from supine to standing position.

Visit 2: Age, hypertension, diabetes, smoking, prevalent MI, BMI, LDL, antihypertensive medications, derived stroke/ TIA algorithm.

Visit 3: Age, hypertension, diabetes, smoking, prevalent MI, BMI, LDL, antihypertensive medications, derived stroke/ TIA algorithm, MRI findings of infarct.