ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #131

1. Title:
CHD and Heart Rate Variability

2. Writing Group (list individual with responsibility first):
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3. Timeline:

Submit proposal to Publications Committee	11/05/91
Complete Data received from URC	01/20/92
Complete analysis	05/20/92
Submit first draft to Publications Committee	08/20/92
Submit to Journal	10/20/92

4. Rationale:
It has long been recognized that the sympatho-vagal system plays an important role in short term cardiac regulation. Heart rate variability is considered as the only simple, noninvasive measurement of sympatho-vagal control on the heart. In Hospital based studies, impaired heart rate variability (reduced vagal tone) was associated with increased risk of post MI mortality in acute MI patients, and also associated with increased risk of sudden death. In some clinical observations, coronary artery disease patients have lower heart rate variability. In ARIC Visit 1, two minutes each of resting and standing heart rate information developed programs to process heart rate data to provide indexes which are commonly accepted as the markers of sympatho-vagal control of heart. Therefore, we can assess the association between heart rate variability and CHD in populations.

5. Main Hypothesis:
1) There is an association between heart rate variability and prevalent CHD.
2) Impaired heart rate variability is a risk factor of fatal and (or) non-fatal incident CHD in the ARIC population.

6. Data (variables, source, inclusion/exclusion):
Visit 1 cohort data for all participants are to be used. Demographic variables, heart rate data, known risk factors for CHD and variables indicating prevalent CHD status in visit 1 are required.

Visit 2 data: variables identifying incident CHD cases and a random sample of non-cases during the available time of follow-up.