ARIC MANUSCRIPT PROPOSAL FORM

Manuscript #375

1. Title: CMV and HSV1 in CHD and MRI infarct cases and controls

2. Writing Group:

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3. Timeline:

Analysis to begin immediately upon completion of antibody determination in cases and controls.

4. Rationale:

Prior results from ARIC have shown association between antibody levels of CMV and HSV1 and carotid wall thickness from ultrasound. Other studies have shown associations between positive Ab to these viruses and clinically defined cases. The hypothesis regarding the pathological process involve both the atherosclerotic process and the thrombotic process. It is thus of great interest to assess the relationship between the antibody levels of these viruses to clinical cases of coronary heart disease and to cases of brain infarcts as determined by MRI.

5. Main Hypothesis:

a. There is an association between antibody levels of CMV and HSV1 clinical CHD cases determined by the ARIC case-control study.

b. There is an association between antibody levels of CMV and HSV1 to brain infarcts (MRI) as determined by the ARIC case-control study.

c. The above relationships remain after adjustment for the main risk factors for CHD and brain infarcts.

6. Data (variables, time frame, source, inclusions/exclusions):

Antibody levels from CMV and HSV1 as determined in the cases (CHD and MRI) and controls. Confounding variables: age, sex, race, blood pressure, lipids, fibrinogen, smoking, and others as necessary.