**THE CLINICAL IMPLICATIONS OF A NORMAL CORONARY CT ANGIOGRAM**

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Introduction: Coronary CT angiography (CTA) is both highly sensitive and specific in detecting intracoronary arterial plaque. We examine the 6-month and 1-year incidence of CAD events in patients with normal coronary arteries based upon CT angiography, and analyzed commonly listed reasons for ordering the test.

Methods: This is an ongoing prospective study of patients who underwent 64-CT scanning since January 2007 and whose results indicated normal coronary arteries. Patients with normal studies were prospectively recruited for a telephone survey at 6 months and 1 year.

Results: Analysis of data garnered from 166 patients of whom 83 were reached for telephone interview was undertaken. Survival data (mortality) for the patients who were lost to follow-up was assessed through the US Social Security Death Index. The average follow-up period was 13.7 months (± 4.2 months). During the follow-up period, no patients had any clinically significant cardiac events; a total of 7 of 83 patients (8.4%) visited the emergency room but only 3 presented for chest pain. None of these patients had any new cardiac diagnoses. Six of 83 patients (7.2%) experienced chest pain; 4/83 experienced continuation of chronic shortness-of-breath but no changes during the follow-up period. One patient died 17 months following her study (cause unknown); otherwise, no patients (including patients lost to follow-up) died during the one-year follow-up period.

Conclusion: A negative coronary CTA predicts a low rate of major cardiovascular events. Further follow-up will indicate the negative prognostic warranty of normal multidetector CT coronary angiography over longer periods of time.