Catheter-Based Coronary Imaging and Hemodynamics

Abstract 4532: The Fate of Elderly Patients (Age 65 and Older) With Normal to Mildly Abnormal Coronary Arteriograms: A 13-year Median Follow-up Study

Abel E Moreyra; Alan C Wilson; Nora M Cosgrove; Yingzi Deng; Kathryn Cullen; Yu-Hsuan Shao; John B Kostis; Robert Wood Johnson

New Brunswick, NJ

Introduction: Normal coronary arteriograms have been associated with good prognosis in a middle aged population. We assessed the hypothesis that elderly patients with this angiographic finding would be less likely to suffer fatal and non-fatal coronary heart events.

Methods: From 11,625 cardiac catheterizations performed at a hospital between 1986 and 1996 we enrolled consecutive patients aged 65 to 88 with normal (NORM) or mildly abnormal i.e. less than 50% narrowing in lumen diameter coronary arteriography (MILD). Excluding patients with valvular heart disease, left ventricular systolic dysfunction or cardiomyopathy the study group was NORM, n=258 and MILD, n=166. Long term outcomes were tracked using the MIDAS database, a NJ state-wide cardiovascular disease registry. Overall mortality and occurrence of fatal and non-fatal coronary heart disease (CHD) events and were monitored at 1, 5, and 10 years. Survival analysis was performed using the Kaplan-Meier method and Cox proportional hazard regression analysis to adjust for covariates.

Results: The average age in the NORM and MILD groups was 70.9±4.7 and 71.6±5.2 (p=0.2). There were more female patients in the NORM group than in the MILD group and (73% vs. 64%, p=0.04). There was no difference in the rates of hypertension (53% vs. 60%), diabetes (15% vs. 17%), or renal disease (0.8% vs. 2%) in NORM and MILD groups respectively. During the entire follow-up period, a total of 100 patients in NORM died (41 CHD deaths, 16%) and 69 in the MILD group died (23 CHD deaths, 14%). The unadjusted CHD death rate at 1, 5 and 10 years was 0%, 2.7%, 8.9% in NORM and 1.8%, 4.8%, 9.0% in the MILD (Log-rank, NS). The adjusted hazard ratios comparing NORM to MILD for CHD death at the same periods were 0.98 (0.80 –1.19), 0.92 (0.75–1.13), 0.93 (0.76 –1.13) all NS, respectively. The
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The rates of hospitalized non-fatal CHD events were not different.

**Conclusions:** These results provide evidence that elderly pts with documented normal or mildly abnormal coronary arteriography have CHD average death rates comparable to the reported CHD death rate (1.2% per year) for the same-age NJ population. Therefore in the elderly a normal or mildly abnormal coronary arteriogram does not appear to confer protection against future fatal or non-fatal coronary events.