

Prognostic significance of a normal or nearly normal coronary arteriogram

William L. Proudfit, M.D.

Cleveland, Ohio

A group of 521 patients studied during a 19-month period beginning January 1964 had no evidence of severely obstructive coronary lesions: 357 had normal coronary arteriograms, 101 had lesions of less than 30% (mild), and 63 had obstructions of 30% to almost 50% (moderate) of the normal lumen diameter. All patients were followed up for 10 years or until death, except for one patient lost at 8 years. Death was probably due to coronary disease in 14 patients; two were thought to have had normal arteries arteriographically; mild disease was diagnosed in two; and ten had moderate lesions. Six deaths occurred within 5 years of arteriography, one in a patient thought to have normal arteries who died suddenly at 48 months. Gross survival at 10 years of the 458 patients who had normal or mildly narrowed arteries was 93.6%, and it was 74.6% for those 63 who had moderate lesions. Survival from coronary disease at 10 years was 99.2% and 83.5%, respectively. A coronary event was defined as any of the following: death probably due to coronary disease, transmural myocardial infarction, or arteriographically proved development of severe obstructive coronary lesions. Coronary events were encountered within 10 years in 2.1% of those who had normal arteries, 13.8% of the group having mild lesions, and 33.0% of those who had moderate

lesions. Transmural myocardial infarction was diagnosed within 10 years of arteriography in 14 survivors: two had normal coronary arteriograms, eight had mild lesions, and four had moderate narrowing. Fifty-one patients had angina defined as pain precipitated by walking and relieved promptly by rest. Death from coronary disease occurred in four, from 73 to 91 months after

arteriography, and all had moderate lesions. However, the diagnosis of angina did not influence the prognosis in the group that had moderate lesions.

The long-term prognosis appears to be excellent in patients who have normal coronary arteriograms or minor lesions, and it is poorer for those who have moderately obstructive lesions.