

## Sample abstract

**English: THE NATURAL HISTORY OF ASYMPTOMATIC CORONARY ARTERY DISEASE: LONG-TERM FOLLOW-UP OF 1487 MALE AVIATORS**

**French: HISTOIRE NATURELLE DE LA MALADIE CORONAIRE ASYMPTOMATIQUE: SUIVI À LONG TERME DE 1487 AVIATEURS MASCULINS.**

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**Introduction:** The prognosis of asymptomatic coronary artery disease (CAD) is not well defined. We examined a database of 1487 asymptomatic military aviators with coronary angiography performed for aeromedical indications to determine clinical outcomes for asymptomatic minimal and significant CAD.

**Methods:** We retrospectively reviewed records of 1487 consecutive coronary angiograms performed on asymptomatic male military aviators between 1971 and 1999. Three angiographic subsets were defined: normal (NL, N = 929) no stenoses, minimal CAD (MCAD, N = 249) maximum stenosis greater than zero but <50%, and significant CAD (SCAD, N = 309) maximum stenosis >50%. SCAD was divided into two subgroups: maximum stenosis 50-70% (N= 124) and maximum stenosis >70% (N = 185). We obtained follow-up via questionnaires, telephone interviews, medical records, and death certificates. Events considered were cardiac death and nonfatal myocardial infarction (MI).

**Results:** Mean follow-up for the 1487 aviators was 14.2 years. Mean age at angiography was 42.2 years for NL, 46.6 years for MCAD, and 46.0 years for SCAD. Average annual event rates for first cardiac event at 2, 5, 10, and 15 years were as follows: NL = 0.0%, 0.0%, 0.1%, and 0.1% per year; MCAD = 0.2%, 0.1%, 0.3%, and 0.8% per year; and SCAD = 1.5%, 1.1%, 1.1%, and 1.4% per year. For the SCAD subgroups, average annual event rates for first event were as follows: 50-70% maximum stenosis = 1.2%, 1.4%, 1.3%, and 1.3%; and >70% maximum stenosis = 1.6%, 0.9%, 1.1%, and 1.5%.

**Conclusion:** Event rates for MCAD were higher than for NL, but less than 1% per year. Event rates for asymptomatic SCAD were lower than for similar symptomatic populations, but still greater than 1% per year. The two SCAD subsets also had event rates greater than 1% per year.