

Gender Differences in Mortality Among Nonagenarians Undergoing Coronary Artery Bypass Procedures in the United States: 1993-1999

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Background. Nonagenarians are among the most rapidly growing segments of the population. Given the increased life expectancy in the US, the consideration of appropriate interventions to treat cardiovascular disease is of increasing importance for this elderly segment of the population. We sought to examine gender differences in prevalence, short, and long-term mortality associated with coronary artery bypass surgery (CABG) procedures among nonagenarians.

Methods. We examined 30-day, 1-year, 2-year, 3-year, 4-year, and 5-year mortality trends among all fee-for-service Medicare patients >90 years of age with a hospital discharge diagnosis of CABG from 1993-1999.

Results. A total of 4,224 Medicare beneficiaries 90 years of age or older received a CABG procedure between 1993 and 1999. The number of procedures increased from 325 in 1993 to 883 in 1999, with approximately half performed on women each year. The overall crude mortality was 13.5%, 26.6%, 33.1%, 40.3%, 50.2%, and 59.0% respectively for 30-day, 1, 2, 3, 4, and 5-year mortality for this cohort. Trends in 30-day mortality were similar from 1993-1999 for men and women, but men had higher mortality rates for 1 to 5-year outcomes, with a marked difference observed at 5-years (54% mortality for women; 63% for men). The percentage difference between men and women (relative to men) widened from 9% for 2-year outcomes to 14% for 5-year outcomes.

Conclusion. Nearly half of all nonagenarians undergoing CABG from 1993-1999 survived 4-year, and 40% survived 5-years. Our findings suggest that women in this age group may derive better long-term survivorship than men.