

Women undergoing PCI display greater number of co-morbidities than men

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New research shows that women undergoing percutaneous coronary intervention (PCI), also known as angioplasty, exhibit more co-morbidities and cardiovascular risk factors than men. Risk-adjusted analyses have now indicated that, in the contemporary era, gender is not an independent mortality predictor following PCI according to the study now available in *Catheterization and Cardiovascular Interventions*, a journal published by Wiley-Blackwell on behalf of The Society for Cardiovascular Angiography and Interventions (SCAI).

Each year more than one million Americans undergo PCI to open blocked arteries according to the National Heart, Lung and Blood Institute. Prior studies have given conflicting reports regarding the outcomes of females versus males after PCI, with some suggesting [women](#) have poorer outcomes compared to men and others finding little or no difference. This contradiction in results has remained under dispute, with some experts suggesting that improved PCI techniques, modification of risk-factors and pharmacological advances may balance adverse outcomes between the genders.

To clarify these [gender differences](#), Annapoorna Kini, MD, and colleagues from Mount Sinai Hospital in New York, explored PCI outcomes in a racially diverse patient group at a high-volume, tertiary hospital. The team identified 4761 female and 8991 [male patients](#) at their institution who underwent PCI between April 2003 and 2009. Information including clinical characteristics, procedural details, laboratory and diagnostic test results, as well as 30-day and 1-year follow-

up data, was collected.

"Our findings extend previous research, and definitively show that following PCI, women do not have an inherently greater mortality risk compared to men," explains Dr. Kini. "However, we did find that prognostic risk factors were significantly more prevalent in women." Results showed that compared to men, females were older, and were more likely to have hypertension, diabetes, and higher [LDL cholesterol levels](#). Kini added, "While men did have higher rates of some modifiable risk-factors, such as smoking, women certainly had a far greater overall burden of co-morbidities and adverse prognostic factors." The data showed that a greater number of women also presented with an unstable coronary syndrome.

In the key findings of this study, the unadjusted post-PCI mortality rate was higher in women compared with men, with 30-day rates of 1.3% versus 0.8%; one-year at 6.1% versus 4.8%; and three-year at 10.4% versus 8.4%. Adjusted modeling, however, which accounted for the gender-imbalance in risk factors, proved that women were not at higher [mortality risk](#) than men following PCI in this racially diverse group. Dr. Kini concluded, "While our study found no risk-adjusted difference in mortality between men and women, both sexes would benefit from attention to modifying factors that reduce the risk of heart disease—eliminating smoking, engaging in physical activity, and eating a healthy diet."

The Centers for Disease Control and Prevention (CDC) reports that heart disease is the leading cause of death among men and women, killing more than one in every four Americans.

More information: This study is published in *Catheterization and Cardiovascular Interventions*.

Provided by Wiley

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