

PRODROMAL SYMPTOMS AND THE DETERMINATION OF CORONARY ARTERY DISEASE IN WOMEN

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BACKGROUND: A recent survey by the American Heart Association found that only 13 percent of women consider coronary artery disease (CAD) their greatest health risk. The reality is that roughly 1 out of 2 women will die of heart disease. A woman's heart is no different from a man's; however, the symptoms of CAD in men and women are very different. Men typically present with difficulty breathing and chest pain, the hallmark symptom of myocardial infarction (MI). Women rarely feel any chest pain at all, and their symptoms are less pronounced. In 2003, McSweeney and colleagues reported that women often experienced early warning or prodromal symptoms such as unexplained fatigue or trouble sleeping as much as one month before MI, indicating the possibility that acting on these prodromal symptoms could thwart an impending heart attack. While prodromal symptoms may not be specific in predicting an imminent MI, the appearance of these symptoms, in conjunction with other CAD risk factors, may assist healthcare providers in determining at risk women who should undergo cardiovascular diagnostic tests with high predictive value such as cardiac catheterization.

PURPOSE: To determine the relationship of women's prodromal cardiac symptoms to coronary artery disease by assessing symptom presence utilizing the McSweeney Acute and Prodromal Myocardial Infarction Symptom Survey (MAPMISS) prior to cardiac catheterization and measuring coronary artery disease by quantitative coronary analysis in the cardiac catheterization laboratory setting post procedure.

METHOD: The study to be conducted will be a cross-sectional correlational survey of 385 women undergoing elective cardiac catheterization at multiple sites within the Florida Hospital – Orlando System. The women must have never had a catheterization before or been diagnosed with coronary artery disease. To assess the predictive variables of prodromal symptoms the MAPMISS will be used. The MAPMISS will be administered via a structured interview technique. To assess the outcome variable Quantitative Coronary Analysis software method will be utilized to assess CAD. CAD is defined as greater than 50 percent stenosis of a major coronary artery.

STATISTICAL ANALYSIS: Logistic regression techniques will be used to control for confounders and estimate independent relationships between the predictive variables and the outcome. Logistic regression analysis will also be used to explore potential differences in between those who have CAD from those who do not.

FINDINGS: Data collection will begin in fall 2005 and completed by spring 2006.

DISCUSSION: Research is only beginning to be performed related to the prodromal symptoms that women experience, but it is clear that women's experiences differ from the warning signs that they expect. The importance of health care providers being aware of the symptoms women experience can not be overemphasized

