Study Suggests Pregnancy and Ovarian Function Are Risk Factors for Coronary Artery Disease

Reproductive factors may be key to early identification and prevention of obstructive coronary artery disease in postmenopausal women

CLEVELAND, Ohio (August 5, 2020)—Coronary artery disease (CAD) is a leading cause of death in both men and women. Women are more susceptible to CAD during the menopause transition because of loss of ovarian function leading to estrogen deficiency. A new study suggests the risk of CAD could be identified earlier by looking at reproductive risk factors. Study results are published online today in Menopause, the journal of The North American Menopause Society (NAMS).

CAD is the most common type of cardiovascular disease. Because women have different symptoms than men, and most traditional health studies have focused on men, women are often misdiagnosed or the diagnosis and treatment may be delayed, creating greater risk for an adverse cardiac event or death.

Previous studies have provided mixed conclusions regarding the association between various reproductive risk factors, such as pregnancy and ovarian function, and CAD. However, most of these studies were small and only evaluated a limited number of risk factors. This new study is one of the first known larger studies (involving nearly 1,500 postmenopausal women) to consider a broad range of reproductive risk factors. These include pregnancy factors, such as the number and type of pregnancy and age at first birth, as well as ovarian function factors including age at menarche, age at menopause, and reproductive life span.

Researchers in this study sought to compare reproductive factors among postmenopausal women with no apparent CAD, nonobstructive CAD, and obstructive CAD, which is the most serious form of CAD and typically leads to the worst prognoses. Because of its seriousness, the researchers specifically focused on identifying reproductive risk factors for obstructive CAD.

They concluded that multigravidity (three or more pregnancies), early menopause, and a shorter reproductive life span are independent risk factors for angiographic obstructive CAD in postmenopausal women. Such information could be valuable in helping prevent and minimize the effect of CAD in women because pregnancy and ovarian function could serve as early indicators of a woman’s risk long before symptoms appear, allowing for earlier life-changing counseling and/or pharmacologic treatment.

Study results appear in the article “Reproductive risk factors for angiographic obstructive coronary artery disease among postmenopausal women.”
“This study expands our knowledge about the link between reproductive factors such as early menopause and shorter reproductive life span and increased cardiovascular risk. Indeed, there is a growing body of evidence suggesting that early loss of ovarian function results in accelerated aging. Future research should be directed toward identifying ways to delay ovarian aging,” says Dr. Stephanie Faubion, NAMS medical director.

For more information about menopause and healthy aging, visit www.menopause.org.

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.