Menopause Diminishes Impact of Good Cholesterol

New study shows women more vulnerable to artery hardening during menopause

CLEVELAND, Ohio (October 8, 2015)—What has previously been known as good cholesterol—high density lipoprotein (HDL)—has now been shown to be not so good in protecting women against atherosclerosis while they are transitioning through menopause. That’s according to a new study from the University of Pittsburgh Graduate School of Public Health that was presented last week at the annual meeting of The North American Menopause Society (NAMS) in Las Vegas.

Atherosclerosis, better known as hardening of the arteries, typically occurs as the result of high blood pressure, smoking and/or cholesterol. However, HDL, the “good cholesterol,” has well-documented benefits in protecting against the hardening process, which can lead to heart attacks and strokes. Recently, medical professionals have theorized that these benefits are diminished during the menopause transition as a result of hormonal alterations—especially estradiol reduction. The University of Pittsburgh Graduate School of Public Health, led a study to prove exactly how much the quality of HDL is impacted during menopause with regard to its ability to help prevent plaque buildup in the arteries.

The study included 225 women in their mid and late 40s who had up to five measures of plaque buildup over a maximum of nine years of follow-up. All participants were tested and diagnosed as being free of any cardiovascular disease at the time of the baseline scan.

“What we found is that, as women transition through menopause, increases in good cholesterol were actually associated with greater plaque buildup,” says Dr. Samar El Khoudary, Assistant Professor in Pitt Public Health’s Department of Epidemiology who served as the lead author for the study. “These findings suggest that the quality of HDL may be altered over the menopausal transition, thus rendering it ineffective in delivering the expected cardiac benefits.”

Dr. Wulf Utian, the executive director of NAMS, noted that this study suggests additional research is needed to fully evaluate how all lipids are impacted during menopause. “There is such limited data available on this important topic,” says Dr. Utian. “We need to better understand how all lipids are impacted in order to protect patients from heart disease, which is the number one killer of women in this country.”

Additional co-authors on this study are: Karen Matthews, PhD; Lin Wang, MS; Maria Brooks, PhD; and Rebecca Thurston, PhD, of University of Pittsburgh; and Carol Derby, PhD of Albert Einstein College of Medicine.
This research was supported by NIH grants.

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.