**CARDIOVASCULAR DISEASE RISK AND MENOPAUSE: WHAT HAVE WE LEARNED FROM SWAN?**

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Despite the recent declines in cardiovascular disease (CVD) burden, CVD remains the leading cause of death in women. Notably, women develop coronary heart disease (CHD) several years after men, with visible increases in CHD risk seen after menopause. This observation led to hypothesize that the menopause transition (MT) contributes to this rise in CHD risk. Over the past 20 years, longitudinal studies of women traverse menopause have contributed significantly to our understanding of the relationship between the MT and CVD risk. By following women over the MT, researchers are able to unravel chronologic aging from ovarian aging effects in relation with CVD risk. Since 1996, the Study of Women's Health Across the Nation (SWAN) has assessed how menopause and the process of the MT may affect future health among 3302 multi-racial/ethnic women aged 42-52 years at baseline, who have been recruited from 7 clinical sites across the US. SWAN has documented dramatic changes in sex hormones, and adverse changes in body fat deposition, lipids and lipoproteins, and vascular remodeling over the MT. These changes can, collectively, increase women’s risk of developing CVD later in life. Interestingly, patterns of sex hormones and vasomotor symptoms over the MT have been linked to greater risk of subclinical atherosclerosis after menopause among SWAN participants. Most recently, SWAN has pointed out new potential CVD risk markers/issues relevant to menopause. One is heart fat which has been found to be greater in postmenopausal women and related to lower estradiol levels. A second evolving issue is higher levels of high-density lipoprotein cholesterol (HDL-C), which has not been consistently cardioprotective in postmenopausal women. Findings from SWAN underline the significance of the MT as a time of accelerating CVD risk, which emphasizes the importance of monitoring women’s health during midlife, a critical window for applying early intervention strategies to reduce CVD risk as women age.