Early Onset Menopausal Symptoms Associated with CVD Mortality

According to a collaborative study carried out in the United States, women experiencing menopausal symptoms earlier in life have an increased risk of cardiovascular disease (CVD)-associated mortality compared to women with later onset symptoms.

Menopausal symptoms affect the quality of life of women experiencing them, and they persist longer and often start earlier in life than previously thought. Importantly, they may mark adverse changes in blood vessels and thus place women at increased risk for CVD.

Previous research has linked vasomotor symptoms (VMS) to markers of CVD risk. However, very few have considered clinical cardiovascular events. Thurston, University of Pittsburgh School of Medicine, and colleagues investigated the association between early-onset menopausal symptoms and CVD events and endothelial function among post-menopausal women participating in the National Heart, Lung, and Blood Institute Women's Ischemia Syndrome Evaluation (WISE) study.

The WISE study enrolled women referred for coronary angiography for suspected myocardial ischaemia. A total of 254 post-menopausal women, aged more than 50 years, who were not receiving hormonal therapy and had both ovaries, were evaluated and followed annually (median=6.0 years). Endothelial dysfunction, which has been shown to be associated with early-onset menopausal symptoms, was evaluated using noninvasive ultrasound for flow-mediated dilation (FMD).

The findings demonstrate that women who had reported early onset VMS (beginning <42 years) and women who never experienced VMS showed a higher CVD mortality risk than women with later-onset symptoms (beginning ≥42 years). Women with early onset VMS also showed lower FMD, which suggests adverse endothelial changes and is associated with higher mortality rates from heart disease. The study provides significant evidence that could lead to timely CVD risk prediction accuracy and early prevention strategies.