

Cardiovascular Diseases Risk Assessment at Menopause

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The risk of cardiovascular disease increases during menopause due to oestrogen deficiency. Women both from urban or rural area have the enhanced risk in similar manner ^[1]. Further, the cardiovascular disease related mortality remains the main killer disease in women more than men after menopause ^[2].

Majority of the women entering into the phase of menopause are usually unaware of the risk of the Cardiovascular diseases (CVD). Similarly, the healthcare providers are also uncertain about the same. Cardiovascular risk is poorly managed in women, especially during the menopausal transition when susceptibility to cardiovascular events increases.

The most common risk factors like smoking, alcohol consumption, abdominal obesity including changes in body fat distribution from a gynoid to an android pattern, dyslipidemia, hypertension, impaired glucose tolerance, uncontrolled diabetes, Hyperuricemia, metabolic syndrome, premature CVD, sedentary life style aggravates risk of cardiovascular diseases in such population. ^[1,2]

Menopausal women, irrespective of age at menopause, have been shown recently to have an increased risk of carotid plaque there by increasing the risk of carotid artery atherosclerosis. ^[3]

Polycystic ovary syndrome during the reproductive age can also have the enhanced CVD risk in the later part of life. Both early and late menarche have been shown to be associated with increased risk of vascular disease. ^[4]

Premature menopause (aged < 40 years), either natural or surgical, has been associated with elevated CVD risk. ^[5] The current literature also suggests a link between aggressive menopausal vasomotor symptoms and adverse CVD risk profile in later part of life. Benefits of HRT on CVD risk and mortality remain controversial and inconclusive to find any recommendations in its favour currently. ^[1,2,4]

The cardiovascular screening protocol in women entering in menopause thus, must be done by primary physician of first contact with detailed personal history, covering age at menopause, age at menarche, history of stress, anxiety, obstructive sleep apnea, PCOS, gestational diabetes mellitus, alcohol intake and smoking, as well as a family history of cardiovascular disease, history about life style, dietary history, history of HRT and other drug history like NASIDs. Screening of a-symptomatic post-menopausal woman should include, weight, height, BMI, fasting lipid profile, plasma glucose, HBA1c and liver, renal and thyroid function tests, microalbuminuria, baseline X ray Chest, ECG & echocardiography. An estimation

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of baseline homocysteine and C-reactive protein (CRP) level is also recommended. Blood tests to measure hormone levels are not necessary for most women at menopause.

Thus, prevention must be addressed in women to identify early and modify the modifiable CVS risk factors, by discouraging smoking, alcohol consumption, and promoting a heart-friendly lifestyle that includes a healthy diet, a low-salt, low-fat, high-fibre diet and regular physical activity, weight check, effective stress management, sleep hygiene practise, tight glycaemic, lipid and hyperuricemia and hypertension control. Further, antiplatelet primary lifelong prophylaxis is also recommended in such women. Intermittent antioxidants and vitamin D deficiency correction in a tailored manner will also prove useful.

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Conflicts of Interest

There are no conflicts of interest.

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Cardiovascular risk assessment and primary prevention at menopause are important strategies to improve cardiovascular disease related morbidity and mortality in such women. The targeted screening with detail evaluation of biochemical and ECG parameters at the yearly interval is recommended in women after attaining menopause. Treatment advice in such women should be provided on an individual basis, depending on the presence of symptoms and evaluation of potential adverse cardiovascular risk or disease. Education/awareness of these cardiovascular risk factors among doctors and primary physicians in both urban and rural areas as well as among postmenopausal women shall go a long way to add years to life and quality of life to postmenopausal women population in their latter part of life.

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