



The Medical **Bulletin**

In Endocrinology

Menopause and The Metabolic Brunt

The missing link in the jigsaw puzzle of metabolic syndrome in a women's life is completed by the "menopause". Metabolic syndrome increases from premenopause to postmenopause independent of age. The pattern of fat distribution which is gynoid in women is attributed to estrogen that promotes gluteo femoral fat distribution. This gynoid distribution of fat prevents women against diabetes, hypertension, dyslipidemia and also cvd. With menopause, estrogen levels dip and there is increased intra-abdominal fat. In the genetically predisposed women, under the right environmental influence this android redistribution of fat, there is increased insulin resistance, increased free fatty acids, and decreased adiponectin. Swan study gave us that for every 1 sd increase in bioavailable testosterone levels, there is 10% increase in the odds of metabolic syndrome.

Osbey et al had shown in their study that women with same weight and same BMI but with waist circumference > 100 cm had significantly higher prevalence of metabolic syndrome. Menopause is also associated with adverse psychological states and social challenges. Stress also increases the vulnerability to stress induced cortisol and increases central fat deposition. Metabolic syndrome in post-menopausal women increases cv mortality and all-cause mortality. Enlarged waist and enlarged triglycerides (ewet) are also associated with increased cv and all-cause mortality. Women with increased vasomotor symptoms have mpre like hood to develop metabolic syndrome. The responsibility on us is to identify the at risk women, and assess them and timely introduce life style modification to prevent metabolic syndrome. We must address obesity in women. The guidelines suggest waist <80 cm in Indian women. Focus on nutrition and physical activity. Maintain or increase physical activity in midlife to prevent or attenuate increase in weight and waist circumference. Regular follow up, positive attitude; support group and right direction can prevent metabolic brunt associated with menopause.

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