Postmenopausal Breast Cancer Survivors at Greater Risk for Metabolic Syndrome

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Metabolic syndrome is more likely to develop in postmenopausal survivors of breast cancer than in postmenopausal women who never had the disease, concluded a cross-sectional study.\(^1\)

Metabolic syndrome is a group of conditions that increases one’s risk of heart disease, stroke, and diabetes. In women, the risk of metabolic syndrome generally increases as menopause nears. Previous studies have shown that the incidence of the syndrome begins to increase during perimenopause, and it has been suggested that this greater incidence is correlated with an increase in testosterone activity.\(^2\) In addition, certain types of cancer treatments, such as antiestrogen therapy for breast cancer, may have an adverse effect on lipid profiles and liver function, further increasing the risk of metabolic syndrome in postmenopausal breast cancer survivors.\(^1\)

To assess the nature of this risk in postmenopausal survivors of breast cancer, the study authors compared 104 postmenopausal breast cancer survivors with 208 matched controls (1:2 sample). All women were 45 years or older and amenorrheic for longer than 12 months. The breast cancer survivors additionally needed to have undergone treatment for breast cancer and be metastasis-free for a minimum of 5 years. Metabolic syndrome was diagnosed if 3 or more of the following criteria were present: waist circumference of 88 centimeters or larger, blood pressure measurement of 130/85 mm Hg or higher, triglyceride level of 150 mg/dL or higher, high-density lipoprotein cholesterol level of less than 50 mg/dL, and blood glucose level of 100 mg/dL or higher.

More breast cancer survivors than women in the control group received a diagnosis of metabolic syndrome (50% vs 37.5%, respectively; \(P<0.05\)). The breast cancer group also had higher rates of obesity (46.2% vs 32.7%; \(P<0.05\)) and lower rates of optimal values for low-density lipoprotein cholesterol, glucose, and C-reactive protein (\(P<0.05\)). Abdominal obesity was the most prevalent of the diagnostic criteria for metabolic syndrome, affecting about two-thirds of participants in each study group. Overall, breast cancer survivors had a higher risk of metabolic syndrome, dysglycemia, and hypertension.

Previous studies have shown that metabolic syndrome is an independent risk factor for breast cancer. The findings of this study indicate that the relationship between metabolic syndrome and breast cancer seems to continue in some form in postmenopausal women. A healthful diet and physical activity are increasingly important in this at-risk group.

Pertinent Points:
- Compared with postmenopausal controls, postmenopausal breast cancer survivors were significantly more likely to have metabolic syndrome.
- Postmenopausal breast cancer survivors also had higher rates of obesity and less optimal biochemical profiles.

References: