

## *Texas Obesity Research Center*

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### **Lifestyle Factors and Ovarian Cancer Outcomes**

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#### ABSTRACT

**Purpose:** Few studies have reported on the lifestyle characteristics of ovarian cancer survivors. The objectives of this study were to characterize the associations between physical activity (PA) and body size (BS) with health-related quality of life (HRQOL) and ovarian cancer recurrence in a sample of regional and distal stage ovarian cancer survivors. **Methods:** Epithelial ovarian cancer survivors in their first clinical remission, with no evidence of recurrent disease were identified from The University of Texas MD Anderson Cancer Center tumor registry. A total of 51 survivors consented to participate in a battery of self-reported questionnaires. Trained staff collected data on anthropometric and recurrence data were collected from the tumor registry. Generalized linear models were used to assess the relationship between PA, BS, and HRQOL. Cox proportional hazard models were used to assess the associations between PA, BS, and recurrence-free survival. **Results:** Most (59%) women were overweight or obese (BMI < 25 kg/m<sup>2</sup>), 49% met current guidelines for PA (150 minutes of moderate to vigorous PA/week), and 29% displayed characteristics of abdominal obesity (>88 centimeters). Women who were not obese reported significantly higher (better) overall HRQOL (point difference = 10.8, P < 0.05) and mental health (point difference = 12.4, P < 0.05) scores than women who were obese. Elevated waist circumference and physical activity were not significantly associated with HRQOL outcomes and we did not find any associations between lifestyle behaviors and recurrence free survival (all P > 0.05). **Conclusions:** Ovarian cancer survivors with characteristics of overall and abdominal obesity may be at risk for deficits in HRQOL and could benefit from interventions designed to reduce weight. More research is needed to determine whether meeting guidelines for physical activity is associated with improvements in health outcomes this population.

KEY WORDS: Ovarian Cancer, Lifestyle, Cancer Survivorship, Physical Activity, Obesity, Recurrence-free Survival, Quality of Life, Distal Stage, Health Outcomes, Mental Health