

The Relationship Between Body Mass Index and Sexual Function in Endometrial Cancer

Rubi M. Garcia, RN, BSN, FNP-C, Alexandra Hanlon, PhD, William Small Jr., MD, FACRO, FACR, FASTRO, Jonathan B. Strauss, MD, MBA, Lillie Lin, MD, Jessica Wells, RN, PhD, and Deborah W. Bruner, RN, PhD, FAAN

OBJECTIVES: To explore the association between pretreatment body mass index (BMI) and post-treatment sexual function in women treated for endometrial cancer.

SAMPLE & SETTING: 28 postmenopausal women treated with vaginal brachytherapy (VBT) took part in this multisite exploratory secondary analysis at the University of Pennsylvania and Northwestern University.

METHODS & VARIABLES: Secondary data analysis was used to determine if pretreatment BMI is associated with post-VBT sexual function in postmenopausal women treated for endometrial cancer at baseline and at six months post-treatment. Because of small sample size, participants were dichotomized according to enrollment BMI: 30 or greater (obese) and less than 30 (non-obese). The Female Sexual Function Index was used to assess sexual function, with total scores of 26.55 or less indicating sexual dysfunction.

RESULTS: Both groups had poor sexual function at baseline. Although improved function was observed with time, neither group reached a score indicating healthy sexual function.

IMPLICATIONS FOR NURSING: Understanding factors that influence sexual health in patients with gynecologic cancer can improve post-treatment quality of life.

KEYWORDS endometrial cancer; body mass index; Female Sexual Function Index; sexual dysfunction
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Endometrial cancer is the most prevalent gynecologic cancer in the United States, with most cases occurring in women aged 50 years or older (Sorrosky, 2012). The number of women diagnosed with endometrial cancer is expected to rise as the incidence of obesity, one of the most common risk factors, increases worldwide (Fader, Arriba, Frasure, & von Gruenigen, 2009). Obesity is a significant risk factor for endometrial cancer. In women who had never used postmenopausal hormone replacement therapy, a body mass index (BMI) of 35 or greater increased the risk for developing endometrial cancer by 441%, compared to a 51% decrease in risk in a woman with a BMI of less than 22.5 (McCullough et al., 2008). In addition, research indicates an association between obesity (BMI of 30 or greater) and lower recurrence-free survival, as well as lower overall survival rates, among patients with endometrial cancer (Ko et al., 2014).

One of the hallmark signs of endometrial cancer is abnormal postmenopausal bleeding; it affects about 90% of women with endometrial cancer, and its visible manifestation often prompts women to seek care and allows for detection of endometrial cancer at earlier stages of the disease (American Cancer Society [ACS], 2016a). Seventy-two percent of endometrial cancers are detected at stage I, whereas 3% are detected at stage III (Sorrosky, 2012). According to an analysis from the National Cancer Database, vaginal brachytherapy (VBT) is the most common adjuvant treatment for early-stage endometrial cancer, and its use has been increasing (Rydzewski et al., 2016). VBT is a form of radiation therapy that involves the insertion of a cylindrical applicator containing radioactive material into the vagina at varying lengths, durations, and radiation doses, depending on the cancer stage (ACS, 2016b; Small et al., 2012).

All therapies associated with treatment of endometrial cancer (surgery, radiation therapy, and/or