Abstract

Objective: To determine the prevalence and study the association of ovarian, uterine, and breast cancers with endometriosis.

Methods: A cross-sectional study of all women with a tissue-proven diagnosis of endometriosis postoperatively in a tertiary care hospital between January 1, 2010, and December 31, 2019, was conducted to determine the prevalence of coexistent malignancy. Patient details were obtained from electronic clinical records. Univariate analysis followed by multivariate analysis was done to find independent risk factors associated with malignancy.

Results: Out of 800 patients, 104 (13.0%) were found to have coexistent malignancy: ovarian (50, 6.2%); endometrial (33, 4.1%); synchronous ovarian and endometrial (7, 0.9%); and breast (14, 1.8%). Increasing age (odds ratio [OR] 1.13; 95% confidence interval [CI] 1.09-1.16), higher levels of CA 125 (OR 1.002; 95% CI 1.001-1.005), postmenopausal status (OR 6.2; 95% CI = 2.0-19.2), duration of endometriosis over 5 years (OR 4.7; 95% CI 2.5-9.0), and endometriomas larger than 8 cm (area under the curve 0.83) were predictive of coexistent malignancy.

Conclusion: Endometriosis is associated with an increased risk of ovarian, endometrial, and breast malignancy. Increasing age, postmenopausal status, higher levels of CA 125, larger endometrioma, and long-standing disease are predictive risk factors.