Background

- Objective: to examine the association between weight change after BC surgery and breast cancer-related outcomes in the early phase after surgery.

- Methods: longitudinal study conducted in 264 consecutive patients with early BC treated at the Cancer Campus in Girona (Catalonia, Spain), from August 2009 to May 2014.

- Patients and Methods: cohort of 264 consecutive patients, median age was 57 years (range 23-84) and median body mass index (BMI) was 26.4 (range 19.1-41.1) kg/m². All patients had undergone breast-conserving surgery (LC) and/or mastectomy (M) with axillary lymph node dissection. Additional treatments included hormonal therapy (HT), chemotherapy (CT), trt C (RT), trt B (BC), and trt A (AT). The primary endpoint was weight change at the 12-month follow-up.

- Outcomes: weight change, body image, and breast cancer-related outcomes (Quality of Life (QoL) and body scale). The QoL was measured using the EORTC QLC-C30 and the Breast Cancer QLQ-BR23. Body image was assessed using the Body Image questionnaire.

Results

- Weight change at 12 months was -1.74 kg (SD 10.14 kg), and 13.3% of patients gained weight, 13.3% lost weight, and 73.3% had stable weight. The mean BMI was 26.4 kg/m² at baseline and 25.7 kg/m² at 12 months (p<0.001).

- Multivariable analysis showed that age, pre-surgery BMI, and receipt of endocrine therapy (ET) were significantly associated with weight change.

- Conclusions: weight change at 12 months after BC surgery was influenced by age, pre-surgery BMI, and receipt of ET. Understanding the factors that influence weight change could help in the development of personalized interventions to improve QoL and body image in these patients. Further research is needed to explore the mechanisms behind these associations and to develop effective interventions to prevent weight regain after BC surgery.