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ABSTRACT

Changes in body composition after chemotherapy treatment for breast cancer

Background

Breast cancer is the most frequently diagnosed type of cancer in women worldwide. Mortality is decreasing over time thanks to the improvement of adjuvant treatments, in women at greater risk adjuvant chemotherapy plays a very important role in reducing the risk of future relapse; however, chemotherapy can involve major physical and metabolic changes

This project was born from the desire to investigate which are the main changes in body composition and blood pattern in these cancer patients, before and after chemotherapy. One of the main purposes of the study was to check if there were any changes such as weight gain and BMI. There are currently no data on the physical and metabolic changes that may affect patients undergoing adjuvant therapy with paclitaxel for breast cancer.

Patients and methods

In this retrospective observational study, the overall results were analyzed from medical records of 30 female patients with breast cancer treated with adjuvant chemotherapy with paclitaxel. The data collected that includes many physical and metabolic parameters deriving from the bioimpedance analysis. These data were analyzed by a descriptive statistical analysis.

Results Among all the data considered, some have actually proved themselves statistically significant and indicative of a change in the condition pre and post therapy. The biggest difference were found in terms of body weight, BMI and total body water.

Conclusion The demonstration of the hypothesis, such as a significant increase of weight, BMI and total body water, has allowed a variety of idea for thought for possible proposals to expand the therapeutic care pathway of patients with breast cancer.

Keywords breast cancer; adjuvant chemotherapy; increase of weight, BMI; total body water.