Introduction

• The main treatment for breast cancer is the total or partial mastectomy that can be or not followed by chemotherapy. Although the rate of survivals has been increased in the last five years, these treatment procedures can cause negative consequences as negative symptoms of self-esteem, poor quality of life (QoL) and losses in sexuality. Pilates exercises have been investigated in the treatment of the homolateral arm of the surgery showing encouraging results, but considering that Pilates technique enhances the strength of the whole body, including improvement of pelvic floor muscles (PFM) as shown by previous studies, the aim of this study is to investigate the impact of these exercises technique on sexuality, self-esteem and QoL in survival women of breast cancer.

Methods

• Randomized clinical trial :16 mastectomized into two groups: experimental (n=9) and control (N=7)
• Inclusion and exclusion criteria
  Sedentary women and over 18 years old; With at least 1 year after partial or total mastectomy of malignant neoplasm; Sexually active No PFM dysfunctions, no urinary infection and no neurologic diseases.
• Evaluation
  PERFECT/perineometer; Female Sexual Function Index (FSFI) EORTC questionnaires (EORTC QLQ-BR23 and EORTC QLQ-C30)
• Intervention
  Experimental group - 15 sessions of Pilates exercises, twice a week during 7 weeks, supervised by a physiotherapist. Control group- the same exercise protocol, but at home and without the supervision of any professional.
• Statistical Analysis
  Analysis of variance by ANOVA, and post-test of BONFERRONI, considering a level of significance of 5%.

Results

• Groups were homogeneous at baseline.
• At the end of the treatment the PFM MVC of the G1 increased from 17.0 ± 13.3 to 25.8 ± 16.5 cmH2O (p = 0.044) but there was no difference between groups (p = 0.196).
• In the PERFECT scheme, G1 improved in all domains (P – p=0.029; E – p< 0.01; R - p< 0.01; F - p< 0.01) and this was significant between groups (P – p= 0,32; E – p< 0.01; R – p = 0,05; F – p=0.05).
• In the FSFI questionnaire, G1 increased from 19.9 ± 9.9 to 23.5 ± 10.7 (p = 0.012), but there was no difference between groups. In EORTC QLQ-C30 the G1 showed improvements in the following domains: physical functional scale (p = 0.008) and emotional scale (p = 0.002) and in this domain the result was significant between groups (p=0.013).
• For EORTC QLQ-BR23, G1 showed improvement in the domains: sexual function (p = 0.001), future perspectives (p = 0.001) and side effects (p = 0.001), no difference was found between groups in this scale;
• The G2 showed improvement in the EORTC QLQ-C30 questionnaire were presented improvement in the fatigue domain (p=0.005), nausea (p=0.032) and pain (0.021), and in the EORTC QLQ-BR23 G2 showed improvement in the breast symptoms domain (p=0.004).

Conclusions

The results indicate that Pilates exercises increased the contractility and pressure of the pelvic floor muscles, improved the sexual function, self-esteem and quality of life of women who survived breast cancer.

References