

**PRESENTATION: ORAL PRESENTATION (FAST PRESENTATION)
– 2ND BEST CLINICAL RESEARCH STUDY**

<https://doi.org/10.29289/259453942025V36S11060>

1060 – Low-intensity exercise during chemotherapy infusion for fatigue, functionality and neuropathy in women with breast cancer

Brenda Taynara Costa¹, Carla Elaine Andrade¹, Simara Cristina Silva¹, Ana Claudia Tavares¹, Leonardo Hermenegildo Barato¹, Idam de Oliveira Junior¹

¹Hospital de Câncer de Barretos – Barretos (SP), Brazil.

Introduction: Chemotherapy for breast cancer, although effective, is associated with significant toxicities such as cancer-related fatigue and chemotherapy-induced peripheral neuropathy, which impair functionality and quality of life. Exercise performed during infusion emerges as a strategic opportunity to mitigate these effects, utilizing a period in which patients are otherwise inactive.

Methods: This randomized clinical trial included 41 women (G1–Intervention: 18; G2–Control: 23) undergoing treatment at Hospital de Amor Barretos. G1 performed low-intensity exercise (Borg Scale score 2–3; 30–40% of maximum heart rate) for 25–30 minutes during infusion. Functionality (using the International Physical Activity Questionnaire–IPAQ), fatigue (using the Fatigue Assessment Scale–FAS), and neuropathy (using the Antineoplastic Induced Neurotoxicity Questionnaire–AINQ) were assessed at baseline (M1) and after five cycles (M2).

Results: For upper-limb neuropathy, a statistically significant difference was observed ($p=0.040$), with G2 reaching 34.8% of cases at the highest severity level (grade 4), compared to only 11.1% in G1. In lower-limb neuropathy, G1 limited severity to 16.7%, whereas G2 reached 39.1% at M2. Regarding fatigue, G1 demonstrated absolute stability ($p=1.000$) and a recovery trend, while G2 showed deterioration toward severe fatigue. In terms of functionality, G1 reduced sedentary behavior from 77.8% to 66.7%, whereas G2 showed an increase in inactivity from 52.2% to 60.9%.

Conclusion: Low-intensity exercise during chemotherapy infusion proved to be a safe and clinically relevant strategy, associated with attenuation of peripheral neuropathy progression, stabilization of fatigue, and improvement in functionality, representing a promising approach for managing adverse effects in women with breast cancer.

Ethics: Research Ethics Committee Approval (CAAE 82161424.6.0000.5437).

Registry: Brazilian Registry of Clinical Trials (ReBEC), RBR-5dz9yq8.

Keywords: exercise therapy; antineoplastic agents; breast neoplasms.