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937 – Can a physical exercise session immediately after chemotherapy reduce adverse effects in breast cancer patients? A pilot study

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Introduction: Physical exercise has been shown to be a valuable adjunct in cancer treatment; however, most patients undergoing treatment do not achieve the minimum recommended levels of physical activity. Therefore, brief targeted interventions may represent feasible alternatives during therapy.

Objective: This study aimed to examine the effects of a physical exercise session performed after chemotherapy infusion on adherence to the intervention, fatigue, pain, and perceived quality of life in women undergoing breast cancer treatment.

Methods: A randomized crossover intervention was performed. Patients were invited to participate; adherence and intervention effects were monitored across two chemotherapy sessions (with or without exercise). The exercise session included the Short Physical Performance Battery (SPPB) and 40 minutes of treadmill walking at 61–71% of maximum heart rate (HRmax). The primary outcomes assessed were adherence, fatigue (FACT-F), pain (BPI), and quality of life (FACT-B+4).

Results: Of the eligible patients invited (n=30), only 47% (n=14) agreed to participate or remained in the study during the interventions, and 36% (n=5) of these were unable to complete the full intervention. Improvement in the physical well-being subscale one week after chemotherapy was observed only among patients who completed the full 40-minute walking session (p=0.04). No significant changes were found in fatigue or pain outcomes.

Conclusion: A single exercise session performed immediately after chemotherapy improved physical well-being one week later. However, no significant effects were observed on fatigue or pain. The findings also suggest that even a single post-chemotherapy exercise session may not be feasible for all patients.

Ethics: Research Ethics Committee Approval (CAAE 79062324.8.0000.8123).

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