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The Effects of Exercise on the Body's Tolerance to Breast Cancer Treatments

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Introduction

Breast cancer is known as one of the most common cancers that is found in women. It has been a prevalent topic that caused several deaths yearly. Breast cancer takes a toll on the human body which results in thousands of deaths each year. A rise in breast cancer deaths ultimately leads to a rise in research and finding new ways on how to increase the human body's tolerance to breast cancer treatment in order to prevent deaths. Exercise is known as a common intervention used during the treatment of breast cancer in order to keep the body healthy and strong enough to handle the harsh effects of cancer treatments. The goal for this study is to find out the extent of the correlation between exercise and the body's tolerance to breast cancer treatments. The objective of this research study is to evaluate the connection between exercise and the different types of breast cancer treatments: chemotherapy, radiation therapy, and surgery. This study hopes to find how exercising can decrease the amount of negative effects breast cancer treatments may have on a patient's body.

Hypothesis

Exercise will help to improve symptoms of fatigue and pain in patients with Breast Cancer.

Methods

Prospective Sample: Convenience sample of 90 participants from either an oncology infusion center or the operating room. 90 participants will either be currently going through chemotherapy, radiation therapy, or surgery. Randomly divided into two groups (n = 45), experimental and control groups.

Method: 45 patients will be put through an intensive 6-month exercise program (experimental group). 45 other patients will not go through an exercise program and will continue with scheduled treatments (control group). Both groups will be given two surveys to fill out before treatment starts and after the 6-month long program: brief pain inventory and the revised piper fatigue scale. The experimental group will have a 6-month exercise program consisting of water exercises 60 minutes twice a week and aerobic exercises for 60 minutes 3 times a week. Aerobic exercises would include flexibility and stretches to help with muscle pain. The participants will be given the two surveys at the beginning, during the 3-month mark, and after the last exercise session. The participants will also be observed once a week during their exercise sessions.

Research design: Longitudinal mixed-method design.

Materials: Observations, surveys, water and aerobic exercises

Results

Results have not yet been collected but will consist of a t-test comparing the two groups and their pain and fatigue levels. The brief pain inventory and revised piper fatigue scale will be used in order to retrieve values for the T-Test and to assess the effectiveness of exercise. Descriptive statistics will be used in order to show a correlation between exercise and reduced levels of fatigue and pain

Conclusion

Exercise has a positive impact on decreasing the effects of fatigue and pain in patients going through breast cancer treatments. Implementing exercise routines during treatment will help to decrease the negative effects they may have on patients.

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