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# Effect of Aerobic Exercise and Resisted Exercise on Immunoglobulins in Breast Cancer Patients

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**Abstract:** Breast cancer is a malignant tumor that starts in the cells of the breast. A malignant tumor is a group of cancer cells that can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body. The disease occurs almost entirely in women, but men can get it, too. The purpose of the study was to determine the effect of aerobic and resisted exercise on immunoglobulin. Sixty patients with breast cancer were included in this study and were randomly divided into three equal groups: (A,B and C).Group A underwent chemotherapy received Aerobic exercise, 3 times per week for5 month, group B underwent chemotherapy received Resisted exercise, 3 times per week for5 month and Group C received chemotherapy for one session every 21 day .The clinical findings of the patients were analysed before and after the treatment via serum blood analysis. All sixty patients completed the study. There were no adverse effects observed. Serum immunoglobulin IgA analysis difference before and after the treatment was statistically significant ($p = 0.0001$). It was concluded that Aerobic and Resisted exercise has an significant effect on immunoglobulin IgA.
**Keywords:** Breast cancer, Aerobic Exercise, Resisted Exercise, Immunoglobulin.

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