

ABSTRACT

Thesis: Hemostatic Adaptations following Exercise Training in Patients with Cancer

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Background: Thrombosis is a common and critical consequence of cancer. Changes in thrombotic potential were examined after exercise training in patients with cancer. **Methods:** Eight cancer patients (65 ± 11 yrs) completed this study, five exercising and three non-exercising controls. Venous blood samples were obtained at baseline and after approximately 12 weeks of study participation. Weekly physical activity was measured using a standard, validated physical activity questionnaire. APTT, PT, fibrinogen and factor VIII were measured before and after the 12-week intervention. **Results:** A time x group interaction trend ($p=0.067$) was observed for fibrinogen. Plasma concentrations decreased in the exercise group (355 ± 49.3 mg/dL to 331 ± 19.5 mg/dL), but increased in the control group (341 ± 52.4 mg/dL to 384 ± 107.9 mg/dL). Physical activity significantly decreased over time in both groups. **Conclusions:** Exercise training may reduce coagulation potential in cancer patients more than usual and customary care.