CANCER-RELATED FATIGUE WITHIN THE FIRST 100 DAYS OF THERAPY IN ACTIVE AND INACTIVE CHILDREN WITH CANCER

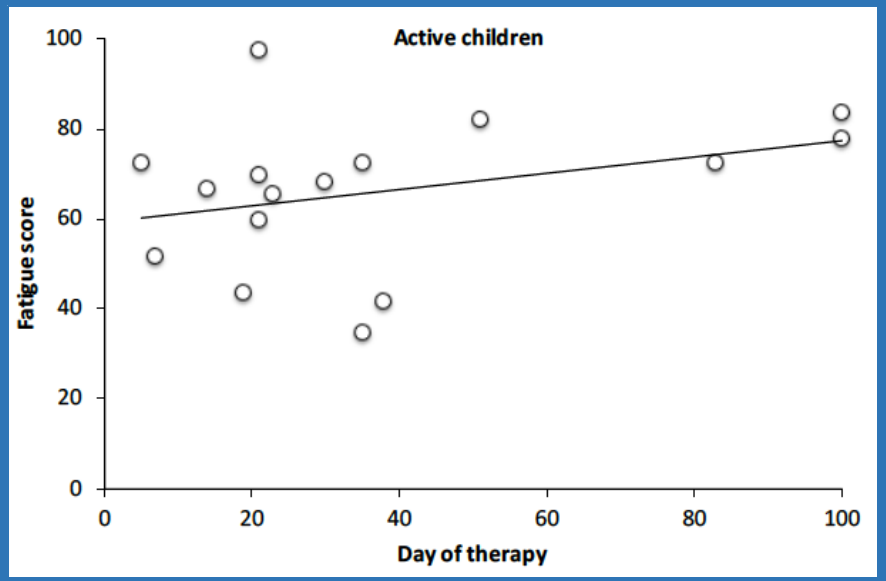
A CROSS-SECTIONAL STUDY

Platschek AM[1], Henckert S[1], Kontny U[2], Simon T[3], Nagel J[2], Böhlke L[3], Hero B[3], Imhof L[2], Koch B[2], Abel T[1]

[1] German Sport University Cologne, Institute of Movement and Neurosciences, Germany
[2] University Hospital Aachen, Dept. Pediatric Oncology and stem cell transplantation, Germany
[3] University Hospital Cologne, Dept. Pediatric Oncology and Hematology, Germany

Objective: In pediatric oncology, cancer-related fatigue (CRF) is one of the most common and distressing side effects of cancer and its treatment. There is limited information about CRF levels at different points during therapy. The objective of this study was to investigate CRF levels in pediatric oncology patients within the first 100 days of therapy, also divided into an active and inactive group.

Materials and Methods: In a cross-sectional study, 32 pediatric patients (age 12.06±2.7 years, mixed cancer) within the first 100 days of cancer therapy completed the PedsQL Multidimensional Fatigue Scale questionnaire. Activity levels were assessed using a questionnaire dividing a typical 24-hour day into sleeping time, sitting, lying awake in bed, and active time. Based on the reported current activity levels, participants were categorized into a more active group [AG] and a more inactive group [IG] using a median split.



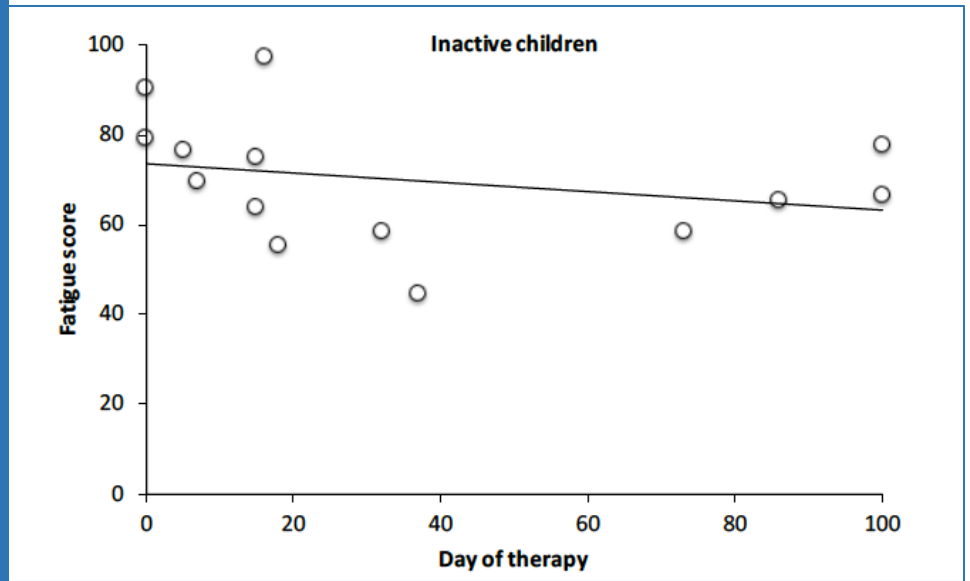


Fig. 1 & 2: Correlation between day of therapy and Fatigue score in active and inactive children

Results: In the overall cohort, the average CRF level was 67.38±14.92, with no significant differences at various time points during therapy (r=0.057; P=0,760). Within the divided groups, mean activity levels during treatment were 3.34±1.70 (AG) and 0.94±0.17 (IG) hours/day (P<.001). Regarding the correlation between day of therapy and CRF, there was a moderate positive correlation in AG (r=0.333; P=0.207) and a low negative correlation in IG (r=-0.220; P=0.430) (Fig. 1 & 2). Higher CRF values indicate lower CRF level.

Conclusion: More active patients tended to experience improved CRF levels as therapy progressed, while less active patients exhibited lower CRF levels. These findings suggest that physical activity may positively influence CRF outcomes over the course of treatment. Exercise interventions should be offered at all stages of treatment to help mitigate side effects.

Deutsche Sporthochschule Köln
German Sport University Cologne

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