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Physical exercise recommendation for patients with chronic myeloid leukemia - a multicenter survey from the East German Study Group for Hematology and Oncology (OSHO #97)

Trainingsempfehlungen für Patient*innen mit Chronisch myeloischer Leukämie unter Berücksichtigung der Symptome und Präferenzen – eine multizentrische Studie der Ostdeutschen Studiengruppe Hämatologie und Onkologie (OSHO #97)

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Introduction: Due to current drug therapy options, patients (pts) with chronic myeloid leukemia (CML) have, a similar life expectancy to the general population. However, their quality of life (QoL) may be impaired by disease - and therapy-related side effects (DTrSE) or symptoms as cancer-related fatigue (CrF). Supportive measures as exercise therapy can reduce symptom burden in cancer pts¹. For solid tumor, acute leukemia, or lymphoma pts specific exercise guidelines exist while no separate recommendations are available for CML pts. To complete the therapeutic approaches, this study is developing CML-specific exercise recommendations considering DTrSE, symptoms and exercise preferences.

Methods: In the course of a one-time, multicenter, anonymous survey of CML pts, demographic data (gender, age, body mass index (BMI)) as well as QoL were recorded using a visual analog scale (0 - very bad to 100 - very good). Symptoms, such as CrF and bone/muscle pain were queried using MPN Symptom Assessment Form² (0 – absent, 100 – worst imaginable, ≥ 30 = moderate to severe). DTrSE as skin symptoms and splenomegaly as well as exercise preferences, favoured type (individual vs. group), surrounding and frequency were collected.

Results: A total of 212 questionnaires were analysed (110 female (52%), median age 54 years, BMI 27 ± 5). The mean QoL was indicated with 70 ± 22 . The prevalence for moderate to severe CrF was 50%, and for bone/muscle pain 40%. Most common associated symptoms were skin appearances (44%), and splenomegaly (10%). CML pts prefer individual training (73%) outdoor (66%) or at home (44%). Fifty-two percent of pts favour training once or twice per week.

Conclusion: CML pts have frequently a higher BMI, which should be considered when planning training. The predominant symptoms of CrF and pain are barriers to physical activity.

The preferences of CML pts regarding the amount of exercise are below the recommendations¹. In order to increase the patients' long-term motivation for physical activity specific exercise recommendations for CML pts will be developed based on the results.

References:

¹Campbell, KL et al, *Med Sci Sports Exerc.* 2019;51:2375–2390

²Scherber R et a, *Blood* 2011;118(2):401–408

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