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Physical exercise recommendation for patients with polycythaemia vera in consideration of symptoms and preferences - a multicenter survey from the East German Study Group for Hematology and Oncology (OSHO #97)

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

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Introduction: Hematopoietic cancer and their respective treatments often cause a reduction in physical and cognitive function. Thereby quality of life (QoL) of the affected patients (pts) is reduced due to disease- and therapy-related side effects (DTrSE). To prevent a decline of physical capacity and onset of DTrSE evidence-based exercise recommendations are currently given. These are primarily based on patient studies performed in solid tumors or leukemia/lymphoma affected and are usually guided by DTrSE. Currently no separate recommendations for pts with polycythaemia vera (PV) are available. Thus, this study aims to develop specific exercise recommendations in order to create physical activity incentives for PV pts.

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

Results: A total of 182 questionnaires were analysed (124 (68%) female, median age 60 years). The mean QoL was indicated with 65 ± 21 . The prevalence for moderate to severe CrF was 60%, concentration problems 44%, and bone/muscle pain 36%. Most common associated symptoms were skin appearance (49%), splenomegaly (35%), and increased bleeding

propensity (28%). PV pts prefer individual training (79%) outdoor or at home (79% resp. 56%). Fifty-four percent of pts favour training once or twice per week.

Conclusion: The cohort studied has a high symptom burden with impaired QoL, indicating that PV pts may benefit from specific exercise programs. The preferences of PV pts regarding the amount of exercise are below the recommendations¹. In order to increase the patients' motivation for physical activity and thus their QoL in the long-term, specific exercise recommendations for PV pts will be developed based on the results.

References:

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

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

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