

Sabine Felser<sup>1</sup>, Christian Junghanss<sup>1</sup>, Julia Rogahn<sup>1</sup>, Lars Arne Bonke<sup>1</sup>, Daniel Fabian Strueder<sup>2</sup>, Jana Stolle<sup>3</sup>, Susann Schulze<sup>3</sup>, Markus Blaurock<sup>4</sup>, Michael Schroeder<sup>5</sup>, Sabina Ulbricht<sup>6</sup>, Christina Grosse-Thie<sup>1</sup>

## **Feasibility of an individual home training program for head and neck cancer patients – results of the multicenter OSHO #94 study**

Machbarkeit eines individuellen Heimtrainingprogramms für Patienten mit Kopf-Hals-Tumoren - Ergebnisse der multizentrischen OSHO #94-Studie

<sup>1</sup>Department of Medicine Clinic III, Hematology, Oncology, Palliative Medicine, Rostock University Medical Center, Rostock, Germany

<sup>2</sup>Department of Otorhinolaryngology, Head and Neck Surgery, Rostock University Medical Center, Rostock, Germany

<sup>3</sup>Department of Hematology and Oncology, University Hospital Halle, Germany

<sup>4</sup>Department of Otorhinolaryngology, Head and Neck Surgery, University Medicine Greifswald, Greifswald, Germany

<sup>5</sup>Department of Trauma, Reconstructive Surgery and Rehabilitation Medicine, University Medicine Greifswald, Physical and Rehabilitation Medicine, Germany

<sup>6</sup>Institute for Community Medicine, Department of Social Medicine and Prevention, University Medicine Greifswald, Greifswald, Germany

**Background:** Physical activity may be a key factor in rehabilitation of patients with head and neck cancer (pwHNC). The East German Study Group for Hematology and Oncology (OSHO) is conducting a study to evaluate the effects of a 12-week home-based, unsupervised, individualized training program on quality of life (QoL, primary endpoint; OSHO #94)<sup>1</sup>. Here, we present the feasibility results.

**Methods:** A multicenter, single-arm, prospective, longitudinal study is conducted by the OSHO (DRKS00023883). Demographic and clinical data are collected. Adherence to the training (e. g., frequency, duration) as well as adverse events in terms of this are documented by patients in a training diary and queried weekly by a therapist. The program consists of an individualized training (selected exercises for mobilization, coordination, strengthening, stretching) of three units per week á 15-30 min and should be supplemented by at least 2 units of endurance training á 30 min. We verified the hypothesis that the proportion of pwHNC who dropped-out of the training program is lower than 30%. QoL is assessed using EORTC-QLQ-C30, before and after the training program.

**Results:** During 01/21 to 02/23, a number of 25 pwHNC (52% male, 66 ± 13 years, 92% complete remission) were included. Due to surgery or suspected relapse three patients (12%) dropped out. On average, those who completed the training program exercised 7 ± 3 times per week. Three adverse events (AE; pain) were reported. QoL was higher after the training program before the start (64 ± 16 vs. 72 ± 14,  $p = 0.042$ ).

**Discussion:** Home-based training in pwHNC seems to be feasible. The program was completed by 88% and the reporting of AEs were low. The majority of pwHNC performed more training sessions as required by protocol.

**Conclusion:** The feasibility of the study protocol was confirmed. Based on these findings the study will proceed recruiting.

Indication of source:

<sup>1</sup>Felser S et al., ONCOLOGY RESEARCH AND TREATMENT 2020; 43 (SUPPL 4): 134