

# Kurz- und mittelfristige Effekte eines individuellen Heimtrainings für Patienten mit Kopf-Hals-Tumoren - Ergebnisse einer multizentrischen einarmigen Interventionsstudie (OSHO #94)

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## Generelle Daten

**Bevorzugter Präsentationswunsch:** Vortrag

**Thema:** Kopf-Hals-Tumoren

**Englischer Titel:** Short- and medium-term effects of individual home exercise for head and neck cancer patients – a multicenter single-arm intervention trial (OSHO #94)

## Abstract Text

**Introduction :** The 'OSHO #94' trial investigated the short- and medium-term effects of individualized home exercises in head and neck cancer patients [1].

**Methods:** This multicenter, single-arm, interventional study included patients aged  $\geq 18$  years in aftercare or stable remission while on immunotherapy. Patients received an individualized home exercise program (mobilization, coordination, strengthening, stretching exercises), performed at least three times a week for 15–30 min. Additionally, moderate-intensity aerobic training was recommended two to three times a week for 30 min. During the 12-week intervention, participants kept a training diary and received weekly physiotherapist calls, followed by a 12-week follow-up without contact. Outcomes assessed pre-/post-intervention and at follow-up included quality of life (QoL, EORTC QLQ-C30), physical activity level (Leisure Score Index (LSI), amount per week), body composition (bioimpedance analysis), shoulder/cervical spine range of motion (ROM, goniometer), and aerobic performance (6-minute walking test, 6MWT). Adverse events (AEs) were recorded.

**Results:** 53 patients (57% male, median age 63 years) were enrolled, of whom 83% completed post-assessment and 72% follow-up. Median training time during the intervention was 257 min/week (95 min individual, 162 min aerobic). Median global QoL increased post-intervention by 4 points ( $p=0.186$ ) and by 8 additional points at follow-up ( $p=0.109$ ). Emotional (63 vs. 75,  $p=0.011$ ) and social functioning (67 vs. 83,  $p=0.002$ ) improved, while fatigue ( $p=0.013$ ) and dyspnea ( $p=0.035$ ) decreased. LSI increased (25 vs. 39,  $p=0.003$ ), whereas total physical activity duration remained stable. Muscle mass increased ( $p=0.014$ ), body fat decreased ( $p=0.009$ ), while body mass index remained stable. ROM improved in some shoulder/cervical spine axes ( $p<0.05$ ), as did 6MWT distance (551 m vs. 582 m,  $p<0.001$ ). Some short-term effects could be detected medium-term. Nine participants (17%) reported training-related AEs, mainly pain, dizziness, nausea, and cramps.

**Conclusion:** An individualized home exercise program for head and neck cancer patients is safe to implement. Physical activity level improved despite unchanged total activity duration suggesting increased training intensity. In combination with the individualized home exercises and remote support, home training was effective. After support ended, the effects were sustained.

[1] Felser et al. (2024) PLoS ONE 19(8)

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