Effects of exercise training on different quality of life dimensions in heart failure with preserved ejection fraction: the Ex-DHF-P trial.

Despite suffering from poor prognosis, progressive exercise intolerance, and impaired quality of life (QoL), effective therapeutic strategies in heart failure with preserved ejection fraction (HFpEF) are sparse. Exercise training (ET) improves physical QoL in HFpEF, but the effects on other aspects of QoL are unknown. The multicentre, prospective, randomized, controlled Exercise training in Diastolic Heart Failure Pilot study included 64 HFpEF patients (65 ± 7 years, 56% female). They were randomized to supervised endurance/resistance training in addition to usual care (ET, n = 44) or usual care alone (UC, n = 20). At baseline and after 3 months, QoL was assessed (36-item Short-form Health Survey (SF-36), Minnesota Living With Heart Failure Questionnaire (MLWHFQ), and Patient Health Questionnaire (PHQ-9). Exercise improved the following SF-36 dimensions: physical functioning (p< 0.001, p = 0.001 vs. UC), bodily pain (p = 0.046), general health perception (p< 0.001, p = 0.016 vs. UC), general mental health (p = 0.002), vitality (p = 0.003), social functioning (p< 0.001) physical (p< 0.001, p = 0.001 vs. UC), and mental component score (p = 0.030). ET did not improve role limitations due to physical and emotional problems. The MLWHFQ
total scale (p < 0.001) and the MLWHFQ physical limitation scale (p < 0.001, p = 0.04 vs. UC) also improved with ET. The MLWHFQ emotional limitation scale did not change with ET. With ET, also the PHQ-9 total score improved significantly (p = 0.004, p = 0.735 vs. UC). In patients with HFpEF, exercise training improved emotional status, physical and social dimensions of QoL as well as symptoms of depression from pre to post test. Physical dimensions of QoL and general health perception also improved significantly with exercise in comparison to usual care.