

**11194****Physical and psychological reconditioning in long covid syndrome patients: results of a structured physical exercise program**

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**Background:** Long Covid Syndrome (LCS) is used to describe signs and symptoms that continue or develop after acute COVID-19 infection. Natural history and treatments of this syndrome is still poorly understood. In literature there is currently a lack of data on the real effectiveness of a multidisciplinary rehabilitation program based on structured physical exercise (SPE) in these patients.

**Purpose:** To evaluate safety, effectiveness and feasibility of a structured individualized rehabilitation program in improving physical and psychological parameters in patients with LCS.

**Methods:** Twenty-eight patients with LCS (19 males, mean age 57 years) underwent an accurate medical screening process, body composition evaluation, cardiopulmonary exercise test (CPET), muscular strength assessment, quality of life (QoL), psychological assessment and counselling, before and after a 12-sessions SPE program.

**Results:** At baseline, all LCS patients showed severe impairments in physical performance, QoL and psychological parameters. No adverse effects and dropouts were observed during training session. After the rehabilitation program, significant improvement in CPET parameters, upper and lower limb muscular strength, perceived physical and mental health, body composition, depression and anxiety and Covid residual symptoms was observed.

**Conclusions:** The present study confirms severe impairment of patients with LCS and suggest that a multidisciplinary rehabilitation program based on SPE could promote their physical and psychological recovery.