## INTEGRATED REHABILITATION THERMAL PROTOCOL IN POST-COVID PATIENTS.

Giovanni Barassi<sup>1</sup>, Maurizio Panunzio<sup>1</sup>, Giuseppe di Stefano<sup>1</sup>, Antonella di Iulio<sup>2</sup>, Antonio Colombo<sup>1</sup>, Umberto Vincenzi<sup>3</sup>, Raffaello Pellegrino<sup>4</sup>, Angelo Di Iorio<sup>5</sup>, Andrea Santamato<sup>6</sup>.

1. Center for Physiotherapy, Rehabilitation and Re-Education-CEFIRR-Gemelli Molise, 86100Campobasso, Italy. 2. Department of Thoracic Surgery, "Santo Spirito" Civil Hospital, Via Fonte Romana, 8, 65124Pescara (PE), Italy.

3. Thermal Medical Centre, Castelnuovo della Daunia (FG) Italy.

4. Campus L.U.de.S. Sagl via dei Faggi 4 – 6912 Lugano – Pazzallo.

5. Antalgic Mini-Invasive and Rehab-Outpatients Unit, Department of Innovative Technologies in Medicine & Dentistry, University "G. d'Annunzio", Viale Abruzzo 322, 66100 Chieti, Italy.

6.Spasticity and Movement Disorders "ReSTaRt" Unit, Physical Medicine and Rehabilitation Section, OORR Hospital, University of Foggia, 71122 Foggia, Italy.

**Background:** The coronavirus disease 2019 (COVID-19) pandemic is having a profound effect on all aspects of society. The aim of this study is to evaluate effects of integrated rehabilitation thermal protocol in post-COVID patients.

**Materials and Methods:** A group of 30 post-COVID patients (mean age 59  $\pm$  12), referred to Thermal baths Castelnuovo della Daunia (FG, Italy), with Hospital of Gemelli Molise (CB, Italy), from June to December 2021, were enrolled after medical examination. The subjects were evaluated at T0 (admission protocol), at T1 (after 8 weeks). All patients received rehabilitation protocol four times a week. Outcome measures were: COPD Assessment Test (CAT), the modified Medical Research Council (mMRC) dyspnea scores.

**Results:** Results showed a statistically improvement in CAT (p 0, 05) and MRC (p 0, 001).

**Conclusions:** Integrated rehabilitation thermal protocol in post-COVID patients could reduce symptoms and improve quality of live. It could be and integrative treatment in multidimensional approach in post-COVID patients.

Key words: COVID, pulmonary, rehabilitation