

Rehabilitation in post-COVID patients. A single center experience

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The COVID 19 disease is frequently associated with significant disability related to intensive care unit-acquired weakness, deconditioning, myopathies and neuropathies. However there are no data on the results of a specific rehabilitative treatment in this group of patients.

The aim of our work was to evaluate the effectiveness of a personalized rehabilitative therapy in group of post-COVID patients (A, 47 patients, average age 65.3±11.6 y, 27 M,) comparing the results with a group of post-cardiosurgical patients COVID 19 negative (B, 47 patients, average age 63.5±10.3 y, 29 M) evaluating the degree of clinical complexity (Rehabilitation Complexity Scale, RCS-E V13) and the degree of autonomy recovery (Six-minute walking test SMWT, Barthel Index, BI) pre and post-treatment. In Group A patients the Rehabilitation program is associated with a significant improvement in autonomy recovery (BI admission 29.7±20 vs discharge 72.7±28.6 p<0.005, SMWT admission 146±25 vs 318±18 m, p<0.005) and in clinical complexity (RCS admission 10.9±1.1 vs discharge 5.3, p<0.05).

At admission the comparison between Group A vs B has show:

1. a reduced pre-rehabilitation hospital stay (days) in Group A vs B (8.2±2 vs 31±5 0.005)

2. a similar degree of clinical complexity (RCS scale A 10.9±1.1 vs 1.6±11.2 p ns)

3. a greater loss autonomy in post-COVID patients (BI scale A 29.7±20 vs B 47.7±19, p 0.05; SMWT A 145±25 m vs B 255±18 m, p 0.05)

After a similar period of rehabilitation (A 29.7±12.8 days vs B 29.6±10 days, p ns) we observed in both Groups:

1. a reduction of clinical complexity ((RCS scale A 5.3±2 vs 6.6±2 p ns)

2. an improvement of degree of autonomy recovery ((BI scale A 72.7±28 vs B 47.7±19, p ns; SMWT A 385±18 m vs B 410±25m, p ns)

Conclusions: Post-COVID patients show a greater loss of autonomy than post-cardiosurgery patients. Rehabilitative treatment has proven effective in ensuring adequate functional recovery with similar results to those obtained in the population of cardiological subjects COVID 19 negative.