

8.09 Pulmonary Function Tests in COVID-19 Recovered Patients Attending a Pulmonary Rehabilitation Programme

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Pulmonary Rehabilitation (PR) is a well-recognised intervention in chronic respiratory disease. Its role following COVID-19 infection is under investigation. A retrospective review of pre and post pulmonary function tests (PFT's) performed in forty patients participating in an eight week PR programme, was completed. All PFTs were carried out according to the ATS/ERS 2005 guidelines.

52% of participants were male with a mean age of 52 +/- 13.2 years and BMI 33 +/- 8.3 Kg/m². Twenty five patients reported resolution of dyspnoea after the PR programme. Mean FVC, FEV1, DLCO and MEP values pre and post PR were normal, with a significant improvement in the FVC post-PR. Mean MIP was mildly reduced pre-PR with a significant improvement post-PR but it did not normalise.

Table 1(8.9). PFT Results

Pulmonary Function Tests	Pre-PR	Post-PR	P value
FVC %predicted	100.5 ± 27.2	105.3 ±18.7	0.006
FEV1 %predicted	97.6 ± 20.8	100.5 ± 17.7	0.084
DLCO %predicted	83.8 ± 17.0	85.5 ± 14.7	0.397
MEP cmH ₂ O	100.9 ± 42.6	102.4 ± 39.1	0.527
MIP cmH ₂ O	70.4 ± 32.8	75.9 ± 31.2	0.014

Reduced inspiratory muscle strength is associated with dyspnoea given the post-PR improvement in this value it may be useful for patients undergoing PR post-COVID-19 infection.

Conflict of Interest: None to declare