

8.12 Lung Function and Airway Impedance in Patients Attending Post-COVID Clinic

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Forced oscillometry is used to evaluate the Respiratory system resistance (Rrs) and reactance (Xrs). It is typically used to assess patients with asthma and more recently in post-COVID patients. Our aim was to evaluate the advantage of using oscillometry in post-COVID patients attending our centre. We conducted a cross-sectional study evaluating lung function test in two groups of post-COVID patients; Hospitalised patients (10 received ICU care, severe disease) versus Non-hospitalised (15, mild disease). Twenty five patients were studied, 7% patient in the mild group and 60% in the severe group had impaired lung function; restrictive pattern was more common. Alterations observed in the mild group include 20% patients with partial reversibility, 13% high resistance (Rrs) and 7% high reactance (Xrs) whilst 60% were normal. The severe group had high Xrs in 40% of cases. Oscillometry detected more abnormal cases than spirometry, 33%, mostly in the mild group. There was also a positive association between restriction and high reactance, particularly in the severe group (40%) suggesting tissue stiffness. Thus, oscillometry may be a more sensitive test than spirometry in detecting impaired lung function, particularly fibrosis in the post-COVID patients. However larger studies are necessary to better understand the utility of oscillometry in this cohort.

Conflict of Interest: None to declare