

Category : **Family communication**

**A242 - Correlation of persisting post-discharge symptoms in patients hospitalized for covid-19 pneumonia with severity of the disease**

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### **Introduction:**

Post-discharge sequela in patients hospitalized with COVID-19 disease are under investigation. Factors potentially associated with persistent post-COVID-19 symptoms were explored in patients hospitalized in COVID-19 medical wards and/or ICU.

### **Methods:**

Patients with confirmed SARS-CoV-2 disease (severe and non-severe) hospitalized and successfully discharged at home were evaluated for persisting clinical symptoms and performed lung spirometry, lung CT scan and echocardiography. Blood sampling for IgG SARS-CoV-2 detection by the LIAISON® SARS-CoV-2 S1/S2 IgG assay was done. Factors influencing persisting symptoms for more than one month after the patients' discharge were analyzed by descriptive statistics and ROC curve for serum antibody titers and severity of the infection

### **Results:**

Among 45 patients, men (n=30,66.7%) with mean age (+/-SD) 59.62 (10.25) years and mean BMI (+/-SD) 30.62 (4.41) Kg/m<sup>2</sup> presented after a mean post-discharge time of 71.11 days, COVID-19 was severe in 20% of cases. Comorbidities (62.2%) included hypertension (n=15), dyslipidemia (n=13), diabetes mellitus (n=6). Echocardiography revealed mild (n=28) or moderate (n=2) diastolic dysfunction, being normal in 9 patients. In 35% of CT scans fibrotic lesions were detected. Lung spirometry was abnormal in 21/36 patients (58.3%) more often in those with persisting symptoms >1 month after discharge (p=0.05): fatigue (90,3%), dyspnea (38,7%), cough (38,7%), myalgias/arthralgias (35,5%), loss of smell/taste (35,5%) and dizziness (19,4%). Mean (+/-SD) IgG SARS-CoV 2 titer was 234,42 (130,10) AU/ml whilst most seriously ill patients during hospitalization present the highest titer [ROC AUC 0.787 (95%CI 0.657-0.918)].

### **Conclusion:**

More than 50% of patients presented with persisting symptoms -predominantly fatigue- for > 1 month post-discharge and abnormal spirometry even if only 20% of patients had severe disease during hospitalization which correlated with higher post-discharge SARS-COV-2 IgG titers