

Category :[ICU organization](#)

A102 - Peripheral nerve injuries 3 months after a critical Covid-19 pneumonia.

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Introduction:

Peripheral nerve injuries (PNI) have been associated with prone positioning (PP) in mechanically ventilated (MV) patients with COVID-19 pneumonia. The aims of this retrospective study were to assess PNI prevalence three months (M3) after intensive care unit (ICU) discharge, and to search for some risk factors.

Methods:

During the first and second waves of the pandemic, all COVID-19 adults who survived an ICU stay ≥ 7 days were included if they attended the M3 consultation at our follow-up clinic. PNI referred to limb weakness, pain, hypoesthesia or paresthesia. Data about demographics, medical history, ICU stay (illness severity, duration of MV, PP, neuromuscular blocking agents and insulin; corticosteroids, peak of glycemia, creatine kinase and C-reactive protein) and M3 outcomes (autonomy using Barthel index, quality of life (QOL) using EQ-5D scale) were recorded. Data are expressed as median (Q1-Q3).

Results:

56 patients (age 62 (55-71)y, all obese, SAPS II 35.62 (16-82)) survived an ICU stay of 20 (3-64)d for COVID-19 pneumonia and were followed at M3. From them, 75% (42/56) received MV during 17 (11-25)d, and 55.4% (31/56) patients had at least one PP session. At M3, 41.1% (23/56) declared motor and/or sensitive symptoms of PNI, located mainly at feet, thighs, hands and arms. PNI significantly impacted Barthel index: 100 (70-100) vs 100 (90-100) in survivors with and without PNI, respectively ($p=0.013$). Their QOL was similar. After multivariate binary logistic regression with stepwise selection, MV duration was significantly associated with PNI ($p=0.037$), independently of a wave effect. The other parameters were not associated with PNI.

Conclusion:

In this cohort, at least 40% of critical COVID-19 survivors presented PNI 3 months after ICU discharge, associated with a significant alteration of autonomy. Only MV duration was observed as a potential independent risk factor. A larger cohort is needed to complete these preliminary results.