

Category : **Respiratory: other**

A273 - Organising pneumonia due to covid-19 and its impact on prognosis

M Maneira Sousa¹ ; M Adao-Serrano¹ ; B Rodrigues² ; S M Fernandes¹ ; J M Ribeiro¹

¹Centro Hospitalar Universitário Lisboa Norte, Serviço Medicina Intensiva, Lisbon, Portugal, ²Faculdade de Medicina de Lisboa, Universidade de Lisboa, Lisbon, Portugal

Introduction:

Organising Pneumonia (OP) diagnosis is histological, however may be inferred by CT pattern.^{[1][2]} OP due to COVID-19 has been reported but its role remains unknown.

Methods:

A single-centre, ethical commission approved, retrospective study was conducted in a tertiary university hospital. Data was collected from patients admitted to ICU with severe COVID-19 between March 2020 and February 2021. OP was defined according to CT chest findings. OP patients were treated with 1mg/Kg/day methylprednisolone as per our protocol. Data was analysed using STATA 15.1.

Results:

We included 338 patients admitted due to COVID-19 pneumonia, mainly male (68%) with mean age 65.0 years \pm 13.1, 71% underwent invasive mechanical ventilation (IMV) for a median time of 13 days and 84% received corticosteroid treatment, 107 dexamethasone only, the remainder methylprednisolone.

126 patients (37%) featured CT compatible with OP. There were no differences between OP and non-OP regarding age, gender, SAPSII or comorbidities. Although patients with OP more frequently underwent IMV ($p < 0.01$), time from symptoms until IMV was longer (10.1 ± 6.1 in C vs 11.9 ± 6.1 days, $p = 0.02$).

Interestingly, duration of IMV and length of stay (LOS) were increased in the OP group (24.5 ± 20.7 vs 14.2 ± 13.9 days, $p < 0.001$; LOS: 28.2 ± 27.6 vs 14.4 ± 15.6 $p < 0.001$), although no difference in ICU (30% vs 29% in OP) or hospital mortality (42% vs 53% in OP, $P = 0.126$) was observed. Not surprisingly, delirium (22 vs 36%, $P = 0.01$), ICU acquired weakness (20 vs 43%, $P < 0.01$) and nosocomial infections (41 vs 69%, $P < 0.01$) were more frequent in OP patients. Of note, 87% versus 45% of C patients were still on corticosteroids at the time of ICU discharge.

Conclusion:

High prevalence of OP was demonstrated in this severe COVID cohort associated with longer IMV time but not a significant increase in mortality. More data is required to determine adequate treatment and impact on prognosis.

References:

1 Kligerman et al Rad path arch 33:1951–75 2013

2 Drakopangiotakis Am J Med Sci 335(1):34-9 2018