

#### 4CPS-007 TARGETING PATIENTS WITH PNEUMONIA BY COVID-19 THAT COULD BE BENEFICIATED BY COLCHICINE

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**Background and Importance** Available data reported different results about the effect of colchicine in patients with COVID-19 pneumonia (CN) proving the need for more analysis. Currently, many of these patients are treated with high-cost new drugs with poor results.

**Aim and Objectives** To evaluate whether treatment with colchicine added to the standard therapy for CN was related to deaths reduction. Secondary objectives: to analyse differences in length of stay (LOS) and combination of drugs in treatment protocols with better results.

**Material and Methods** Multicentre, real-world, controlled, retrospective cohort study (March-June 2020). Inclusion criteria: hospitalised adult patients with CN. Admitted to critical care units were excluded. Experimental group: Patients treated with colchicine who met inclusion criteria (colchicine therapy group [CG]). Control group: those who met inclusion criteria and did not received colchicine (non-colchicine therapy group [NCG]). Patients were matched 1:1 by age ( $\pm$  2years), sex, severity of the disease and comorbidity. To select controls, we chose the consecutively next admitted patient after one treated with colchicine. This allowed us to select control subjects at a close time and place to cases, that is, under similar circumstances in terms of patient care protocols.

**Results** 222 (111 treated with colchicine) patients were analysed. Median age 79 years [66–88] (81 years [66–87] in CG vs 79 years [66–88] in NCG,  $p=0.978$ ). 52.3% men (54.1% CG vs 50.5% NCG;  $p=0.591$ ). Primary endpoint of death occurred in 19 (17.1%) patients in the CG as compared with 32 (29.4%) in the NCG (OR: 0.497; 95% CI: 0.261–0.946;  $p=0.031$ ). Hospital LOS was dichotomised by the median value (10 days), the use of colchicine was associated with a longer hospital LOS when comparing with the control group (OR=1.856; 95% CI:1.089–3.162;  $p=0.022$ ). Proportion of deaths were higher in NCG than in CG in patients  $\geq 70$  years ( $p=0.012$ ). With respect to sex and comorbidity, distribution of deaths showed no significant differences. Almost all patients received antimicrobials (91.9%) concomitantly, death rate: 19/50 (38%) CG vs.31/50 (62%) NCG;  $p=0.023$ ), by antimicrobial: azithromycin (9/19) (47.4%) in CG vs.10/19 (52.6%) NCG;  $p=0.517$ ; ceftriaxone 16/44 (36.4%) CG vs 28/44 (63.6%) NCG;  $p=0.022$  and levofloxacin 4/12 (33.3%) CG vs 8/12 (66.7%) NCG;  $p=0.232$ .

**Conclusion and Relevance** Our study showed lower mortality in hospitalised patients who received colchicine to treat CN. This treatment was particularly beneficial for elderly treated with antibiotics concomitantly. Findings in our study support the need of more randomised clinical trials that could fully elucidate the type of patients who may potentially benefit from this low-cost drug.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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**Conflict of Interest** No conflict of interest

#### 4CPS-008 DOES COMORBIDITY AFFECT ADHERENCE TO INHALERS IN SEVERE ASTHMA PATIENTS TREATED WITH BIOLOGICS?

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**Background and Importance** Comorbidities are often associated with severe asthma including those patients treated with biologics. That often contributes to poorly controlled asthma<sup>1</sup>, which could be related to deficient adherence to inhalers.

**Aim and Objectives** To evaluate proportion of non-adherence to inhalers in patients with severe asthma (SA) treated with biologics according to their comorbidity and to compare two methods to assess non-adherence.

**Material and Methods** Cross-sectional retrospective observational study of patients with SA recruited from the SA unit of a tertiary hospital in Madrid from June to December 2020. We registered demographic data, comorbidities and concomitant therapy for asthma. Non-adherence was defined as pharmacy refill data (PRD)  $<80\%$  to the primary inhaler<sup>2</sup> and/or Test of Adherence to Inhalers questionnaire (TAI) result  $s<50$ <sup>3</sup>. Concordance was assessed by determining the Cohen's kappa statistic. Primary variable: Proportion of patients classified as not having therapeutic adherence measured by both of the following methods: PRD  $<80\%$  in the previous 6 months, and TAI questionnaire: a value  $<50$ . Comorbidities considered: rhinoconjunctivitis, nasal polyposis, anxiety and depression, gastroesophageal reflux, bronchiectasis, aspirin-exacerbated respiratory disease (AERD) and allergic bronchopulmonary aspergillosis.

**Results** 53 patients were evaluated. Median age was 61 years (IQR 51.8–67) and 33 (61%) were women. 41(77%) had comorbidity: 25(61%), rhinoconjunctivitis, 16 (38%) nasal polyposis, 15 (36%) anxiety and depression, 7 (17%) gastroesophageal reflux, 6 (15%) bronchiectasis, 5 (12%) AERD and 1(2%) allergic bronchopulmonary aspergillosis. The highest non-adherence was detected in patients with rhinoconjunctivitis by the two methods: 50% and 55% according to TAI and PRD, respectively ( $k=0.022$  95% CI -0.256–0.3). Agreement of both methods was low in all comorbidities; nasal polyposis: 42% vs 23% ( $k=-0.049$  95% CI -0.421–0.519); anxiety and depression: 25% vs 32% ( $k=0$  95% CI -0.317–0.317); gastroesophageal reflux: 8% vs 10% ( $k=0.364$  95% CI -0.21–0.938) and AERD 17% vs 10% ( $k=-0.154$  95% CI-0.659–0.967).

**Conclusion and Relevance** Our results highlight a high prevalence of non-adherence to inhalers in patients with SA and other comorbidities treated with biologics. Therefore, hospital pharmacists should focus on this patient's adherence to inhalers, especially those with rhinoconjunctivitis, when providing pharmaceutical care to SA treated with biologics in practice.

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**Conflict of Interest** No conflict of interest