TNF Cs, therapeutic ADA Cs ≥ 8 $\mu\text{g/mL}$ and IFX Cs ≥ 3.5 $\mu\text{g/L}$.

For statistical analysis, continuous variables were expressed as mean (95% CI) or median (IQR), depending on the distribution; categorical variables were expressed as number and frequency. A univariate analysis was performed to identify variables that may affect drug concentrations, using independent samples t tests (continuous variables) or the χ^2 test (categorical variables). Logistic regression was performed to quantify the influence of explanatory variables on Cs.

Results 640 Cs determinations were included (372 ADA, 247 IFX) corresponding to 185 patients (47 ulcerative colitis, 138 Crohn's disease): mean age was 41 (12) years, 50% were women and median BMI was 24 (5) kg/m^2 . IFX Cs were significantly associated with CRP (OR 4.68 (95% CI 2.49 to 8.81); $p < 0.001$). ADA Cs were significantly associated with CRP (OR 4.58 (95% CI 2.45 to 8.56); $p < 0.001$), albumin (OR 2.175 (95% CI 1.06 to 4.46); $p = 0.034$), dose intensity (OR 3.11 (95% CI 1.58 to 6.12); $p = 0.001$) and BMI (OR 0.88 (95% CI 0.82 to 0.95); $p = 0.001$).

Conclusion and relevance Achieving therapeutic drug concentrations increase the probability of obtaining disease control (low CRP inflammatory marker) both for ADA and IFX. High levels of albumin and intensified ADA dose increased the probability of achieving ADA therapeutic levels, while high BMI decreased the probability of achieving ADA therapeutic levels. Established ADA fixed dosing may be reconsidered for tailored dosing.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-335 EXPERIENCE IN THE USE OF TOCILIZUMAB IN PATIENTS WITH COVID-19. HAS IT REALLY BEEN EFFECTIVE?

¹C Valdazo Martín*, ¹N Ramon Rigau, ¹M Rosado Ancín, ²M Urrestarazu Larrañaga, ¹A Santaolalla Sánchez, ¹R Hernanz Chaves, ¹JJ García Albás, ¹E Gómez Ugartondo, ¹L Guisasaola Ron, ¹P Arenales Cáceres, ¹C Martínez Martínez. ¹Hospital Universitario Araba, Hospital Pharmacy, Vitoria-Gasteiz, Spain; ²Hospital Universitario Araba, Internal Medicine, Vitoria-Gasteiz, Spain

10.1136/ejhp-pharm-2021-eahpconf.167

Background and importance Tocilizumab is being used to treat severe SARS-CoV-2 pneumonia.

Aim and objectives To analyse the efficacy of tocilizumab in patients with severe SARS-CoV-2 pneumonia during the inflammatory phase of the disease.

Material and methods An observational retrospective study was conducted between 16 March and 22 April 2020, which included 75 patients (57 men, mean age 67.7 years) treated with tocilizumab. Criteria for severe pneumonia were: failure of at least one organ, oxygen saturation with ambient air $< 90\%$ or respiratory rate ≥ 30 breaths per minute. Prognosis at admission was evaluated with the CURB-65 score. An analysis was performed with SPSS V.23.0. To evaluate efficacy, the variation in C reactive protein (CRP) and lymphocyte count (LC) was measured from the time before tocilizumab treatment until 5 days later, in all patients and separately in those who remained alive and those who died.

Results 75% of patients had a CURB-65 score ≤ 2 on admission. Mean time from onset of symptoms to treatment with

tocilizumab was 11.6 days. 17 patients were admitted to the intensive care unit. Mean hospital stay was 19.7 days. During admission, all patients previously received lopinavir–ritonavir and hydroxychloroquine, 67 high dose corticosteroids, 6 bari-citinib and 15 interferon-beta-1b. 19 patients (25%) died.

Mean CRP before tocilizumab treatment was 154.1 mg/L (95% CI 129.0 to 179.0) versus a mean of 15.2 mg/L (95% CI 8.6 to 21.4) 5 days later. In patients who remained alive, the mean CRP decreased from 163.4 mg/L (95% CI 134.5 to 192.3) to 13.1 mg/L (95% CI 8.9 to 17.3), and in those who died, it decreased from 117.6 mg/L (95% CI 69.9 to 165.2) to 23.2 mg/L (95% CI 0.0 to 52.0). Mean LC before tocilizumab treatment was 1080/ μL (95% CI 360 to 1790) versus a mean LC of 1690/ μL (95% CI 530 to 2860) 5 days later. In patients who remained alive, the mean LC increased from 1180/ μL (95% CI 280 to 2080) to 1810/ μL (95% CI 350 to 3270), and in those who died it increased from 680/ μL (95% CI 550 to 810) to 1220/ μL (95% CI 740 to 1700).

Conclusion and relevance In patients with severe SARS-CoV-2 pneumonia, we found a significant decrease in CRP and an increase in LC associated with treatment with tocilizumab in the inflammatory phase of the disease. Both variations were greater in patients who remained alive. LC prior to treatment with tocilizumab was lower in those who died than in living patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-336 IMPACT OF CHECK OF MEDICATION APPROPRIATENESS (CMA) IN OPTIMISING ANALGESIC PRESCRIBING

¹C Quintens*, ²J De Coster, ¹L Van Der Linden, ³B Morlion, ⁴E Nijns, ⁴B Van Den Bosch, ⁵WE Peetermans, ¹I Spriet. ¹University Hospitals Leuven, Hospital Pharmacy, Leuven, Belgium; ²University Hospitals Leuven, Department of Anaesthesiology, Leuven, Belgium; ³University Hospitals Leuven, Leuven Centre for Algology and Pain Management, Leuven, Belgium; ⁴University Hospitals Leuven, Department of Information Technology, Leuven, Belgium; ⁵University Hospitals Leuven, Department of Microbiology–Immunology and Transplantation, Leuven, Belgium

10.1136/ejhp-pharm-2021-eahpconf.168

Background and importance Pain therapy in inpatients is regularly suboptimal and might be improved by clinical pharmacy services with the aim of optimising pain control and reducing iatrogenic harm related to adverse drug events and overuse. In our hospital, we have implemented a software supported check of medication appropriateness (CMA), which is a centralised pharmacist led service consisting of a clinical rule based screening for potentially inappropriate prescriptions (PIPs) and a subsequent medication review by pharmacists.

Aim and objectives We aimed to investigate the impact of the CMA on pain related prescribing.

Material and methods A quasi-experimental study was performed in a 1995 bed tertiary hospital, using an interrupted time series design. Pre-implementation, patients were exposed to standard of care. Afterwards, a pain focused CMA comprising 12 clinical rules pertaining to analgesic prescribing were implemented in the post-implementation period. A regression model was used to assess the impact of the intervention on the number of pain related residual PIPs. For the pre-implementation period, data collection was performed