

4CPS-032 **HOW TO IMPROVE THE APPROPRIATE PRESCRIPTION OF ANTICOAGULANTS DURING UNEXPECTED EMERGENCY ROOM ADMITTANCE TO THE HOSPITAL? A CASE SERIES REPORT USING PHARMACY PRACTITIONERS**

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Background and importance Serious medication errors can be made during unexpected hospital admittance through the emergency ward. In particular, anticoagulants portray a great risk for patients when proper medication reconciliation is absent. We started using pharmacy practitioners (PPs) to improve this process on the emergency ward. We report here the results of two case series with respect to accuracy in the medication reconciliation on the emergency room (ER) ward.

Aim and objectives To investigate if appropriate embedding of PPs in the process of medication reconciliation during unexpected admittance to the hospital could lead to fewer medication errors downstream in other hospital wards.

Material and methods A PP was embedded in the ER ward team during office hours (08:00 to 17:00) to perform the medication reconciliation of unexpectedly admitted patients instead of ER physicians.

The two case series of admitted patients were chosen in a post-propter design. As a zero measurement, a case series of patients (ZMCS) in a pilot phase was used (October-December 2019). This pilot phase was done to collect data on hospital administration in order to show that PPs could be embedded to do this task. This retrospective dataset consisted of 40 patients, unexpectedly admitted on the ER ward and for whom the ER physicians performed the medication reconciliation. A prospective case series of patients was then performed during the period October-December 2020 under the same conditions and used as the experimental case series (EXCS) to compare with the ZMCS. The number of medication errors in the EXCS divided by the number of medication errors during the ZMCS was our main outcome parameter expressed as a percentage.

After ER admittance patients were transmitted to several other specialist wards.

Results Our results showed a 40% reduction in medication errors downstream in the specialist wards when the PPs were involved in the medication reconciliation process in the EXCS compared to the medication reconciliation done by ER physicians in the ZMCS.

Conclusion and relevance We conclude that PPs can make a valuable contribution to reduce the number of medication errors downstream in the hospital when embedded in the ER ward team.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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Conflict of interest No conflict of interest

4CPS-036 **IS OUR PROTOCOL FOR THE USE OF TOCILIZUMAB IN COVID PATIENTS ADEQUATE?**

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Background and importance Tocilizumab (TCZ) has been a key pillar in the management of pulmonary hyperinflammation in patients with SARS-CoV-2 pneumonia. The incessant publication of new studies assessing its effectiveness and the ideal time of use means that in-hospital protocols are constantly being reviewed and updated.

Aim and objectives To describe the clinical characteristics of hospitalised patients with SARS-CoV-2 pneumonia treated with TCZ and their evolution, and to compare our results with those of the primary endpoint (28-day mortality) of the RECOVERY study.

Material and methods Retrospective observational study of patients administered TCZ between October 2020 and February 2021 in a tertiary hospital. Criteria for TCZ use were PAFI <300 and meeting two of the following three criteria: C-reactive protein (CRP) >150 mg/L, D-dimer >1500 ng/mL and ferritin >2000 ng/mL, and not having contraindications for its use.

Each patient received a single dose of 400 mg if weight <75 kg and 600 mg if weight >75 kg.

Demographic data, comorbidities and days from symptom onset to TCZ administration were collected. Follow-up of analytical data (CRP, D-dimer and ferritin pre- and post- (15 days) TCZ administration). Clinical evolution was evaluated by mortality rate at 28 days.

Statistical analysis: Stata/MP v16.0. Student's t-test was used for comparison of quantitative variables.

Results 39 patients were included, 25 (64.1%) were male, median age 74 (IQR 61–80) years. 61.5% had hypertension, 33.3% obesity, 41% diabetes mellitus, 17.9% chronic kidney disease, 12.8% heart disease. The median time from symptom onset to TCZ administration was 10 (IQR 7–15) days.

The medians prior to and at 15 days of TCZ administration were, respectively: 152.5 mg/L (IQR 89–220.8) and 1.7 mg/L (IQR 0.65–4.2) CRP ($p < 0.001$); 2300 ng/mL (IQR 1195–4889) and 1124 ng/mL (IQR 567–1439) D-dimer ($p = 0.1726$); 1242 ng/mL (IQR 647–2705) and 851 ng/mL (IQR 268–1384) ferritin ($p = 0.1294$). Mortality at 28 days was 64.1%.

Conclusion and relevance Our sample size is smaller than that of the RECOVERY study; however, the days of symptoms until TCZ administration (10 vs 9) and the median CRP prior to TCZ (143 vs 152.5 mg/L) in both studies are very similar. Our mortality is much higher (64.1% vs 29%). We found a statistically significant difference between our pre- and post-CRP data.

With this result, the in-hospital protocol was modified and new criteria for TCZ administration in COVID patients became oxygen saturation <92% or PAFI >300 and CRP >75 mg/L, with no contraindications for use.