IS OUR PROTOCOL FOR THE USE OF TOCILIZUMAB IN COVID PATIENTS ADEQUATE?

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 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: O2 saturation <92% or PAFI >300 and CRP >75 mg/L, and having no contraindications for use.

In subsequent studies we will test whether this update helps to improve mortality outcomes.

 Statistical analysis: STATA/MP®16.0. Student’s t test was used for comparison of quantitative variables

RESULTS

Median age 74 years (IQR: 61-80)

Median time from symptom onset to TCZ administration was 10 days (IQR: 7-15)

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 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: O2 saturation <92% or PAFI >300 and CRP >75 mg/L, and having no contraindications for use.

In subsequent studies we will test whether this update helps to improve mortality outcomes.

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 hospitalized 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 2 of 3:
- C-reactive protein (CRP) >150 mg/L
- D-dimer >1500 ng/ml
- Ferritin >2000 ng/ml
- Not having contraindications

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

We collected:
- Demographic data (age, sex)
- Comorbidities
- Days from symptom onset to TCZ administration
- CRP, D-dimer and ferritin pre and post (15 days) TCZ administration

Clinical evolution was evaluated by mortality rate at 28 days

CONTACT: ana7db@hotmail.com