

INFLAMMATORY PARAMETERS ANALYSIS IN SEVERE COVID-19 PATIENTS TREATED WITH TOCILIZUMAB

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OBJETIVE

The main objective is to evaluate TCZ effectiveness in the modification of inflammatory parameters in severe COVID-19 patients.

MATERIALS AND METHODS

Retrospective observational study patients suffering from COVID-19 admitted at an intensive care unit (ICU) and treated with TCZ from 20th March to 20th May 2020 at a tertiary hospital.



Study variables:

Age
Sex
IL-6 levels
C-Reactive Protein (CRP)
Ferritin
Lymphocytes count
D-dimer
Days at ICU
Deaths
Patients evolution

RESULTS

IL-6 levels on day 0 were 293 pg./ml, peaking at 416 pc/ml on day 3 and decreasing to 241.9 pc/ml on day 7th.

CRP levels raised above the normal range (median 53.35 mg/L on day 0) in all patients before initiation of therapy with TCZ and decreased at day 7th (median 3 mg/L).

Serum **ferritin** decreased from 1798 mg/L on first day to 1197.5 mg/L seventh day of before TCZ.

Lymphocytes count increased from 570 to 1365 lymphocytes/ μ L on day 7.

D-dimer level on day 0 was 2008 ng/ml and increased to 3910 ng/ml seventh. Day 14th it decreased to 1723 ng/ml.

Length in ICU stay was 16.4 days compared to the mean stay of the total number of ICU COVID patients, which was 26.1 days. Patient's mortality was 19.6%, 15.2% remained interned at the end of the study and 65.2% were discharged.

CONCLUSIONS

Results show an improvement in inflammatory markers with TCZ treatment, as well as a decrease in length in ICU stay, similar findings have been reported in consulted bibliography.

Nevertheless, due to potential bias: patients received different treatments before and after TCZ and the small sample size, it is necessary to confirm these results with controlled clinical essays.