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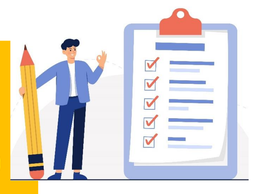
ANALYSIS OF THE EVOLUTION OF INTERLEUKIN-6 IN COVID-19 PATIENTS AFTER BEING TREATED WITH DEXAMETHASONE

BACKGROUND

Hospital's protocol:

IL-6 > 40 pg/ml is required to start treatment with **tocilizumab**



Assessing the role of dexamethasone (DEX) in the evolution of IL-6 during the first hours of the patient's hospital admission **could help prevent a premature use of tocilizumab**.

AIM AND OBJECTIVES

✓ **Assessing the evolution of IL-6 after the use of DEX in patients diagnosed with COVID-19 and IL-6 > 40 pg/ml**

MATERIALS AND METHODS

Retrospective descriptive observational study

Second-level hospital

Nov 2020 - Jan 2021

Data were subjected to Wilcoxon's test

INCLUSION/EXCLUSION CRITERIA

· COVID-19 patients with IL-6 levels above 40 pg/ml:

- treated with DEX
- with determination of IL-6 levels, both at the admission and within the following 96 h.

· Prescription of DEX at least 24 hours before the first determination.

· Use of tocilizumab before the first determination or between determinations.

RESULTS

66.7%

Age: 64 years old [IQR 23]

N=41

12 patients (29.3%) were finally treated with tocilizumab

7 (58.3%) still presented levels of IL-6 > 40 pg/ml

EVOLUTION OF IL-6 LEVES

Hospital admission:
85.6 pg/ml [IQR 110.9]

After being treated with DEX:
24.2 pg/ml [IQR 33.1]

The median time between determinations was 48 hours [IQR 48]

87.8% of the patients experienced a **decrease of IL-6**
p<0.01

The median of differences was **-66.1 pg/ml** [IQR 67,3]
p<0.01

75.6%
IL-6<40 pg/ml

21.9%
IL-6<7 pg/ml

CONCLUSIONS

DEX treatment **reduced IL-6** levels to below 40 pg/ml in most patients in 48 hours

IL-6 monitoring after a DEX treatment could help **prevent an inadequate use** of tocilizumab

It is **necessary to research** the benefits of **tocilizumab** for patients **with low levels of IL-6**

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