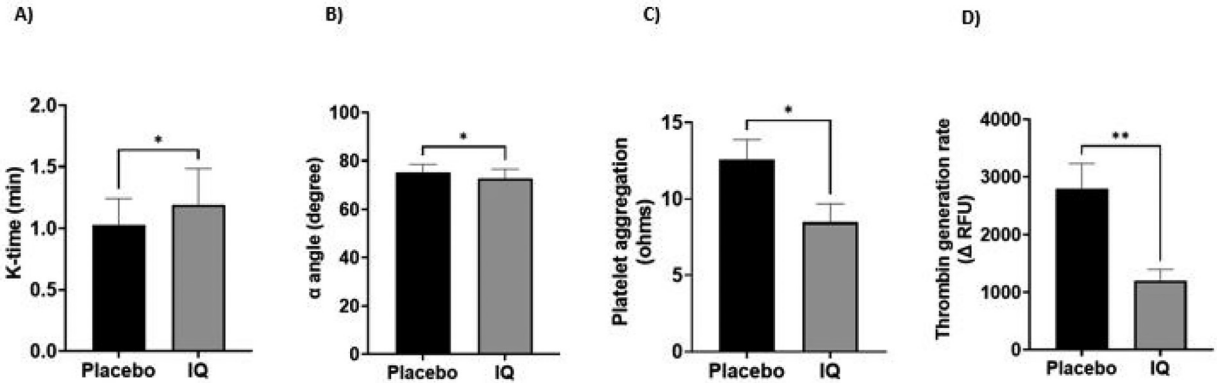

Figure 1: (abstract PB1101): Thromboelastography (A & B), agonist-induced platelet aggregation (C), and Platelet dependent thrombin generation (D). Significant differences were observed in isoquercetin (IQ, n = 22) treated patients compared to placebo (n = 22) when assessing the viscoelastic properties of whole blood coagulation. (A) Significant prolongation in the K- time (clot formation time) and (B) decrease in the alpha-angle (time taken for fibrin cross-linking) in isoquercetin-treated patients (p = 0.03 and 0.01 respectively) suggesting modest antithrombotic effects. (C) Platelet aggregation in response to low dose collagen (1 μg/ml) was significantly reduced (p = 0.04) in the isoquercetin group (n = 22) compared to placebo (n = 22) suggesting antiplatelet effects. (D) Platelet-dependent thrombin generation was significantly reduced in the IQ group (n = 10) compared to placebo (n = 10) (p = <0.01) demonstrating the antithrombotic efficacy of IQ.

Conclusion(s): Short-term, fixed-dose isoquercetin exhibited modest antithrombotic effects in patients with SCD mediated via inhibition of platelet-dependent thrombin generation.

Volume 7 (Suppl. 2) October 2023, 100856
https://doi.org/10.1016/j.rpth.2023.100856

COVID

COVID, Basic Science

PB0613

IL-6 Dosage by ELISA Tests in Patients after COVID-19 Infection: Significant Correlation between Length of Hospitalization and Permanently Altered Levels of Interleukin-6

A. Prezotti[1], D. Campos da Silva[2], H. Vitória[3], A. Zetum[3], H. Rosa[4], V. Ventorim[4], E. Vargas[2], L. Alves[3], R. Netto[2], D. Meira[3], M. Casotti[3], R. Reis[3], S. Marcondes[5], D. Rocha[1], A. Rocha-Neto[5], N. Santos[3], J. Duarte[2], M. Orletti[2], L. Resende[2] and I. Louro[3]
[1]Centro de Hematologia e Hemoterapia do Espirito Santo (HEMOES), Vitoria, Espirito Santo, Brazil; [2]Centro de Hemoterapia e Hematologia do Espírito Santo (HEMOES), Vitória, Espirito Santo, Brazil; [3]Universidade Federal do Espírito Santo (UFES), Vitória, Espirito Santo, Brazil; [4]Universidade Vila Velha (UVV), Vitória, Espirito Santo, Brazil; [5]HEMOES, Vitoria, Espirito Santo, Brazil

Background: The severity of coronavirus disease-19 (COVID-19) is related to an increase in inflammatory cytokines, including interleukin-6 (IL-6). This interleukin is found at elevated levels during a SARS-CoV-2 infection.
Aims: The objective of this study was to evaluate the level of IL-6 serum in post infection patients and verify the permanence of altered IL6 in people who have already been infected. In addition to associating them with the severity of the disease.
Methods: The samples of 226 volunteers were analyzed. The research was approved by the ethics committee (N. 6 37094020.6.0000.5060). Volunteers were not vaccinated and tested positive for at least 30 days. They were divided into 3 groups (THE WHO): A: symptoms mild, less than 14 days; B: moderate, more than 14 days, which required medical support, but the level of oxygen therapy was low flow; C: Serious/severe, more than 15 days that required hospitalization and non-invasive high-flow oxygenation level or intubation. The ELISA sandwich test was used to measure serum IL6 levels. For data analysis the GraphPad Prism 8.0 program was used. Dunn's Multiple Comparison Test was used to establish differences between groups and the Multiple Linear Regression Test was used to relate IL-6 concentration in the hospitalization group with length of stay ($P < 0.05$ significant).
Results: There were no statistically significant between the groups ($P > 0.9999$). However, there was a significant correlation between length of hospitalization and permanently altered levels of IL-6 ($P < 0,0001$).

Figure 1 . Comparison between interleukin-6 levels in groups A (mild symptoms), B (moderate symptoms) and C (serious/severe symptoms).

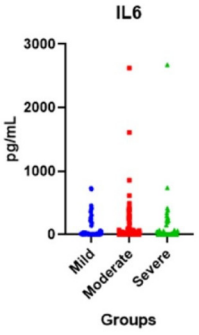

Table 1 - Significance of the model coefficient

V VARIABLE	P VALUE	P SUMMARY
IL-6	**<0,0001**	****
VWF-Ag	<0,0001	****
FVIII	0,0057	**
TNF-alpha	0,3645	ns
HBA1c	0,0054	**
D-Dimer	0,9915	ns

Multiple linear regression test. Significance p<0.05

Conclusion(s): Serum levels of interleukin-6 did not differ between the studied groups. The relationship between disease severity and IL6 is associated with the acute phase of the infection, however, Inflammatory imbalance was related to length of stay. A joint assessment with other inflammatory markers is important for a better understanding of the long-term consequences of SARS-CoV-2 infection.

IMAGE. Comparison between interleukin-6 levels in groups A (mild symptoms), B (moderate symptoms) and C (serious/severe symptoms).

Volume 7 (Suppl. 2) October 2023, 100857
https://doi.org/10.1016/j.rpth.2023.100857

PB0612
COVID-19: Predictive Value of Methemoglobinemia

H. Hadjer[1], B. Mouna Rajaa[2], B. Bouchra[2], B. Adel[3], G. Faiza[2], M. Najdette[4], L. Houcine[5] and S. Abdi[3]

[1]Blida university, Blida, Blida, Algeria; [2]Blida University, Blida, Blida, Algeria; [3]Blida University, Blida, Blida, Algeria; [4]Blida Univerity, Blida, Blida, Algeria; [5]Hospital, Blida, Blida, Algeria

Background: After penetration of the SARS-CoV-2 virus into host cells via ACE2 receptors, an overactive immune response is generated with the production of pro-inflammatory chemokines and cytokines, thus generating reactive oxygen species (ROS) to fight against the virus. However, these free radicals could increase the formation of methemoglobin unable to bind oxygen.

Aims: Indeed, the aim of this work is to study the relationship between the concentration and the kinetics of methemoglobin with the severity and the evolution of the disease.

Methods: 1)Patients: in this series of cases, patients diagnosed with COVID-19 and admitted in hospital were subdivided into 02 groups according to the clinic: in severe form and in moderate form. 2)For each patient a methemoglobin (MetHb) was dosed by the DRABKIN method. This parameter was measured on admission and then every 3 days or 5 days for patients with moderate and severe form respectively.

Results: We tested 102 patients divided into 41 moderate cases and 61 severe cases. Of these 102 patients, 45 patients non-survivos and 57 survived. On admission we found that 90% of our population have a methemoglobin's concentration > 02% and according to the intensity and the evolution of the disease, its rate was statistically insignificant. (table 01 and 02) However, during the evolution of the disease, we noted a disparity in the kinetics of MetHb (table 01 and 02). Indeed, for the moderate form and in the survivors, we find that the concentration of methemoglobin increases between the 03rd and 05th day of admission and then it regresses considerably. Unlike the severe form and non-survivors, its concentration increases gradually.

Conclusion(s): Through the research carried out during this study, we conclude that the disease of COVID-19 causes a series of changes in the blood, mainly represented by the elevation of the methemoglobin level with a dynamic following the progression of the disease.

yes.

Volume 7 (Suppl. 2) October 2023, 100858
https://doi.org/10.1016/j.rpth.2023.100858

Table1: (abstract PB0612).

Table 01 : Kinetics of methemoglobin in patients with COVID-19 according to disease severity

Methemoglobin (%)	MetHb1	MetHb2	MetHb3	MetHb4
Moderat	17.22±17.22	31.67±25.39	19.01±21.9	20.7±24.37
P*	0.0035	0.018	0.74	
Several	23.52±15.7	22.94±18.59	33.86±25.23	35.31±19.47
P*	0.85	0.007	0.72	
P**	0.6	0.05	0.002	0.001

Table 02 : Kinetics of methemoglobin in patients with COVID-19 according to disease evolution

Methemoglobin (%)	MetHb1	MetHb2	MetHb3	MetHb4
Survivant	19.52±15.45	28.4±23.23	23.29±25.03	20.59±21.98
P*	0.022	0.3	0.75	
No-survivant	22.17±15.33	24.6±19.91	33. 04±23.09	35.75±20.86
P*	0.53	0.08	0.57	
P **	0.5	0.4	0.048	0.0007

P* between patient of the same grade. P** between patient of different grade