Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Background/objective: The severity and outcome of COVID-19 are determined by the level of overstimulation of the immune response, age, and comorbidities in the patients infected by severe acute respiratory syndrome coronavirus type 2 (SARS-CoV-2). Lymphopenia is the most consistent finding that characterizes the hemogram in COVID-19 patients. We evaluated the hemogram and compared the lymphocyte count (LC),neutrophil-lymphocyte ratio (NLR), and platelet-lymphocyte ratio (PLR) at diagnosis in COVID-19 patients hospitalized at the Clinical Hospital of the State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil. **Methods:** In this retrospective study, we reviewed the medical notes of 320 adult hospitalized patients with PCR-confirmed COVID-19 at the Clinical Hospital of UNICAMP, Campinas, from March 2020 to March 2021. The hemogram (performed using automated counter-XN 9000^{TM}, Sysmex, Japan) at COVID-19 diagnosis was analyzed, and NLR and PLR were calculated. The primary outcomes were discharge (n = 257 patients who recovered from the disease and were discharged from the hospital), and death (n = 63 those who died during treatment). Statistical analyses were performed using SPSS (version 22). Unpaired data of deceased and discharged COVID-19 patients were compared using Mann-Whitney tests. All results were significant if $p < 0.05$ or except otherwise stated. **Results:** Compared to the 257 discharged patients, the 63 deceased patients were older 56.0 vs 64.7 ys respectively, p = 0.000), the males are more in each group and the duration of hospitalization was not different (18.6 vs 19.7 days respectively, p = 0.12). The leukocyte (8.89 ± 4.50 vs 10.37 ± 7.03, p = 0.289) and platelet counts (227.00 ± 91.15 vs 197.79 ± 97.47, p = 0.119) were not significantly different in the two groups, the hematocrit was higher in the discharged than in the deceased patients (38.84 ± 6.86 vs 35.89 ± 8.57, p = 0.021). The LC was lower in the deceased (0.81 ± 0.59×10^3 vs 1.09 ± 0.80x$10^3/\mu$L, p = 0.002), and negatively correlated with the age of the patients(r = -0.145, p=0.009 at a significant level of 0.01). The deceased group had a higher NLR (17.52 ± 19.20 vs 10.06 ± 12.31, $p < 0.001$) and PLR (366.32 ± 275.03 vs 319.23 ± 331.54, p = 0.047) higher than the discharged group, and both parameters were strongly correlated (r = 0.734, $p < 0.001$ significant level of 0.01). One hundred and thirty-eight (53.7%) of the discharged patients and 45 (71.4%) of the deceased had LC of $< 1.0 \times 10^3/\mu$L. The LC is associated with the disease outcome ($\chi^2 = 6.498$, df = 1, p = 0.011), and the odds for a deceased to have a lymphopenia is 1.9 times that for the discharged patients [OR = 1.87 (95% CI = 1.135-3.085). **Discussion:** Though lymphopenia is consistent in COVID-19, the cause is unclear. Acute recruitment of lymphocytes to the site of infection (mainly the lung) may explain this, thus the lymphopenia may worsen and the LRs will be elevated with the increasing severity of COVID-19. The negative correlation of LC with age and higher odds of lymphopenia in the deceased patients suggest that LC and the LRs at diagnosis could be easily accessible and useful predictors of severity and mortality in these patients. **Conclusion:** Our study supports that lymphopenia is negatively associated with mortality in COVID-19 patients and that the deceased patients have elevated NLR and PLR at diagnosis. These parameters are easily derived from the hemogram and could be utilized as affordable and accessible predictors of outcomes in patients with COVID-19.

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AVALIAÇÃO DA DOSAGEM DO D-DÍMERO EM PACIENTES GRAVES COM COVID-19, INTERNADOS EM UNIDADES DE TERAPIA INTENSIVA, EM HOSPITAL PÚBLICO TERCIÁRIO DA UNIVERSIDADE FEDERAL DE PERNAMBUCO

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Materiais e métodos: Foi feito um estudo de corte transversal com 52 pacientes da UTI-COVID do Hospital das Clínicas da Universidade Federal de Pernambuco (HC-UFPE), no período de abril a junho de 2020, para a avaliação do D-dímero como um marcador de agravamento do quadro clínico dos indivíduos afetados pela doença. Dados foram obtidos a partir dos registros médicos dos pacientes. A mediana dos valores entre os grupos foi usada para encontrar a significância estatística que justificasse o desfecho da doença, relacionado ao óbito (p < 0,05). **Resultados:** Ao serem comparados aos pacientes que receberam alta, os que evoluíram ao óbito apresentaram maiores valores de D-Dímero (2800 ng/mL versus 1800 ng/mL, p = 0,21). Também não houve relevância estatística entre pacientes do sexo feminino e masculino que evoluíram ao óbito ou alta da UTI. DISCUSSÃO: Visto que ainda se sabe pouco sobre a etiopatogenia do SARS-CoV-2, algumas pesquisas citam a importância de marcadores vasculares devido aos achados relacionados à coagulopatia intravascular disseminada (CIVD) em pacientes graves, principalmente com comprometimento pulmonar consequente a altas taxas de tromboembolismo venoso, explicando a razão pela qual o D-dímero se mantém cerca de 3 (três) vezes mais elevado. **Conclusões:** Assim, pode-se concluir que o valor do D-dímero para pacientes que receberam alta da UTI-COVID é inferior (1800 ng/mL) aos que foram a óbito (2800 ng/mL), demonstrando que altos níveis desse marcador podem indicar necessidade de cuidados intensivos em relação ao tratamento com fármacos antitrombóticos evitando possíveis complicações disseminadas que podem levar o paciente ao óbito. Além disso, esse estudo mostra a importância de testes com esse marcador no acompanhamento do infectado para observar a necessidade de novas terapias que minimizem a formação de trombos devido à alta deposição de fibrina nos vasos.

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COVID-19 ASSOCIADO COM ANEMIA HEMOLÍTICA AUTOIMUNE POR ANTICORPOS A FRIO: SÉRIE DE 3 CASOS

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