Hemolytic Anemia Monitored After Post-COVID-19 Infection: Changes Related to General Blood Parameters

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Abstract : Introduction: We are analyzing the topic of hemolytic anemia observed in patients after COVID-19 infection. The purpose of this research is to investigate the development of hemolytic anemia, identify its causes, and study treatment methods. Objective and Task: The goal of our research is to analyze the changes in blood occurring after COVID-19 infection and study the development of hemolytic anemia. Our main task is to analyze the results and assess subsequent changes in patients. Materials and Methods: The study was conducted among patients treated with a diagnosis of COVID-19 in the Department of Infectious Diseases at the TTA 1-Multiprofile Clinic from March to August 2023. Out of the 32 patients included, 16 were female, and 16 were male. Monitoring Blood Coagulation in Patients: The hemoglobin level of patients upon admission was initially measured using the URITEST-150 analyzer. The average for women was 110 g/l, and for men was 120 g/l. Over the course of 3 months, a decrease was observed: an average of 72 g/l in women (a decrease of up to 35%) and 84 g/l in men (a decrease of up to 30%). In the next 2 months, the positive dynamics of hemoglobin levels were observed, with an average increase to 93 g/l in women (>28%) and 112 g/l in men (>25%). Research Results: Hemolytic anemia developed in men within 5 months, reaching up to 112 g/l. In women, this process required a longer period, with the last month of observation (6 months) showing that women reached levels of up to 112 g/l, similar to men. Conclusion: Hemolytic anemia observed in patients after COVID-19 infection was monitored for 6 months (5 months in men, 6 months in women), reaching up to 112 g/l. The first 3 months after contracting COVID showed the period of development of anemia, and the subsequent 3 months indicated a stabilization period in patients.

Keywords : COVID, anemia, hemoglobin, tma, virus, viral infrection **Conference Title :** ICC 2023 : International Conference on COVID-19 **Conference Location :** Goa, India

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