

FEATURES OF THE INNATE IMMUNE RESPONSE DURING THE SARS-COV-2 INFECTION

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First reports of the acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and the disease caused by the virus—coronavirus disease 2019 (COVID-19), were announced in late December 2019. Ever since, the disease has taken more than 6 million lives worldwide. COVID-19 is considered as dominantly respiratory and vascular disease which pathogenesis could be explained by hyperactivation of the immune response. Innate immunity receptors are responsible for the first contact with the virus and subsequent activation of transcription factors leading to the production of the high amounts of interferons (IFNs) and proinflammatory cytokines (IL-1 β , IL-6, TNF, etc.). Such an inflammatory response limits viral replications. However, SARS-CoV-2 have developed several ways to avoid immune protection by the host. Dysregulated secretion of these cytokines may lead to cytokine storm and PANoptosis, a life-threatening condition.

This review article aims to describe the main characteristics of the innate immune response during the SARS-CoV-2 infection.

Acta Medica Medianae 2023; 62(3): 47-53.

Key words: SARS-CoV-2, COVID-19, inflammation, cytokines, receptors