## A Case Report of Pediatric Systemic Lupus Erythematous with Pancytopenia, Following a Covid-19 Infection

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## **Abstract**

Background: Systemic lupus erythematosus (SLE) is an autoimmune disease characterized by various clinical manifestations and a wide profile of autoantibodies. The etiology of SLE is unknown, but it is considered a complex disease involving genetic, hormonal, immunologic, and environmental factors. Pancytopenia can occur in SLE, but it is less common than isolated cytopenias. COVID-19, caused by SARS-CoV-2, was first identified in 2019 as a respiratory disease. Several reports have linked prior or concurrent COVID-19 infections with an increased prevalence of autoimmune and autoinflammatory disorders.

**Case report**: We present a patient with a history of COVID-19 infection two months earlier, who

developed high fever, abdominal pain, and petechiae. During hospitalization, the patient developed pancytopenia. A diagnosis of SLE was established based on clinical manifestations and positive immunological markers. The patient was treated with immunosuppressants according to SLE treatment protocols. We discuss the pancytopenia in SLE, the importance of timely diagnosis, and the potential role of COVID-19 as a trigger or exacerbator of SLE.

**Conclusion**: A timely diagnosis and appropriate therapy for pancytopenia are crucial in the course of SLE, especially considering the potential role of COVID-19 as a trigger or exacerbating factor.

**Keywords**: Systemic lupus erythematosus, pancytopenia, COVID-19