



COVID-19–Associated Immune Thrombocytopenia in a Toddler

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Received: 24 September 2021 / Accepted: 14 January 2022 / Published online: 17 March 2022
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To the Editor: Mild-to-severe thrombocytopenia is associated with COVID-19. It is encountered during the active immune dysregulated phase due to sepsis, drugs, and disseminated intravascular coagulation. In pediatric COVID-19, thrombocytopenia is seen in multisystemic inflammatory syndrome in children (MIS-C). Isolated thrombocytopenia, as in immune thrombocytopenia (ITP), is not part of case definitions of these complications of pediatric COVID-19 and is extremely rare [1]. Only two such cases have been reported previously. Both cases had mild COVID symptoms with no mucosal bleeds and responded well to IVIG and steroids [2, 3].

We report 1-y-5-mo-old well-looking female toddler, who presented with fever and ecchymoses over limbs for two week; with no hepatosplenomegaly, bone tenderness, or lymphadenopathy. She had history of mild COVID-19 five weeks back. Her platelet count was $20 \times 10^9/L$ with giant platelets and no atypical cells. Other cell lines, biochemical parameters, coagulogram, infection workup, and inflammatory markers were normal. COVID-19 RT-PCR was negative. COVID-19 IgG antibodies were elevated (50.8 AU/mL) and IgM antibodies were normal. Hepatotropic viral markers, antinuclear antibody, and immunoglobulin profile were normal. She responded to single-dose intravenous immunoglobulin (IVIG) at 1 g/kg with platelets rising to $100 \times 10^9/L$ after a week and normalizing at 10 wk. She has completed three months follow-up and continues in complete remission.

Our case highlights the need for clinicians to be aware of COVID-19–associated ITP in children and counsel the patient/parents on the identification of signs and symptoms

of thrombocytopenia during recovery phase of COVID-19. Onset of thrombocytopenia 2–3 wk after COVID-19 infection with a negative RT-PCR, high titers of IgG antibodies to COVID-19 and nonfulfillment of MIS-C criteria should raise a suspicion of COVID-19–associated ITP. Diagnostic evaluation in newly diagnosed ITP in children should include COVID-19– antibody levels, in addition to the existing guidelines, to look for COVID-19 as etiological viral infection for ITP [4].

Data Availability On request.

Declarations

Consent for Publication Written informed consent was obtained from the patient's father.

Conflict of Interest None.

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Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

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