Megadose Methylprednisolone for Immune Thrombocytopenia in an Infant Positive for SARS-CoV-2: A Case Report.

Harapan Parlindungan Ringoringo, Edi Hartoyo

Department of Pediatrics, Faculty of Medicine, Lambung Mangkurat University, RSD Idaman Banjarbaru, Banjarbaru, South Kalimantan, Indonesia

BACKGROUND Immune thrombocytopenia (ITP) is rare in infants under 1 year old. Bleeding often occurs when the platelet count is <20 000/uL. The disease can progress because of accompanying COVID-19 disease.

CASE REPORT A 9-month-old boy, weighing 8.5 kg, came to the hospital with petechiae on the forehead, cheeks, mouth, and extremities. The patient had rhinorrhea for 3 days previously and was febrile, pale, weak, and could not drink. He had the measles-rubella vaccination 19 days prior. Physical examination showed no abnormalities of the eyes, ears, nose, throat, and mouth. Heart and lungs were within normal limits, with no organomegaly, lymphadenopathy, or congenital anomaly of the abdomen. Laboratory examination showed hemoglobin, 12.7 g/dL; leukocytes, 7420/uL; platelet count, 16 000/uL; and hematocrit, 37.9%. Erythrocyte sedimentation rate was 14 mm at 1 h and 21 mm at 2 h. Peripheral blood smear showed normal RBC morphology, normal leukocytes, and few platelets. IgG was reactive and IgM was nonreactive on rapid antibody test. RT-PCR was positive for SARS-COV-2. Chest-X-ray showed pneumonia. The diagnosis was newly diagnosed ITP with COVID-19. Patient was treated with 30 mg/kg body weight/day of IV methylprednisolone for 3 days (250 mg); then 20 mg/kg body weight/day (175 mg) orally for 4 days in 3 divided doses. Azithromycin 100 mg/day, zinc 20 mg/day, and vitamin C 50 mg/day orally were also given.

CONCLUSIONS COVID-19 screening is highly recommended during this pandemic to identify it as a potential cause of childhood ITP. Megadose methylprednisolone had an excellent response in alleviating ITP with confirmed COVID-19 in an infant.

Keywords: COVID-19; Infant Health; Methylprednisolone Hemisuccinate; Purpura, Thrombocytopenic, Idiopathic