Sir,
Thrombocytopenia is a common feature of dengue virus (DNV) infection. I report on a patient with DNV infection-related drop in the platelet count, masking the diagnosis of an underlying chronic myeloproliferative disorder.

A 58-year-old man presented to another hospital with a 4-day history of fever, chills, and an erythematous rash. His serum was positive for DNV NS1 antigen and IgM antibodies to DNV. On admission, his hemoglobin (Hb) was 14.6 g/dL, red blood cell count was 7.25 × 10^12/L, mean corpuscular volume was 63 fL, leukocyte count was 11.9 × 10^9/L, and platelet count was 224 × 10^9/L. His platelet count the following day was 400 × 10^9/L. Subsequent platelet counts on days 7, 16, and 20 were 609, 800, and 1081 × 10^9/L, respectively. He was referred for evaluation of possible post-dengue fever reactive thrombocytosis.

His clinical examination showed truncal obesity and was otherwise normal.

His serum iron was 45 µg/dL, total iron-binding capacity was 405 µg/mL, and ferritin was 21.8 ng/mL. Hb electrophoresis showed HbA2 of 2.2% and Hb F of 1.5%. Serum erythropoietin level measured 7.1 mIU/mL. Ultrasound scan of the abdomen showed splenomegaly with a span of 19.5 cm. Blood was negative for BCR-ABL and positive for JAK2 V617F by reverse transcriptase-polymerase chain reaction. He was diagnosed with polycythemia vera (PV) associated with iron deficiency and was begun on hydroxyurea and low-dose aspirin.

Iron deficiency is common in PV and when severe, the Hb level may drop to normal by limiting erythropoiesis and may mask the diagnosis of PV.[1] The discrepant occurrence of marked microcytosis and near-normal Hb together with erythrocytosis is described in alpha-thalassemia and PV associated with iron deficiency.[2] Careful attention to red cell parameters can help in recognizing PV associated with severe iron deficiency presenting with normal Hb;[3] thrombocytosis, leukocytosis, and splenomegaly, when present, can help in suggesting the diagnosis. The identification of JAK2 mutation in this setting helps establish the diagnosis of PV.

Reactive thrombocytosis during recovery from dengue-thrombocytopenia is uncommon but may rarely reach extremely high levels;[4] careful follow-up will help establish the nature of the thrombocytosis in such cases and avoid diagnostic error.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

Prasad R Koduri
Department of Medicine, Mahavir Hospital and Research Center, Hyderabad, Telangana, India

Address for correspondence: Dr. Prasad R Koduri, Department of Medicine, Mahavir Hospital and Research Center, Hyderabad - 500 004, Telangana, India. E-mail: prkoduri@yahoo.com

Submitted: 29-Apr-2019
Revised: 07-Jun-2019
Accepted: 09-Jul-2019
Published: 27-Jun-2020
References


