

Images in Infectious Diseases

Dengue fever with thrombocytopenia and gingival bleeding

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A 45-year-old man was admitted on the sixth day owing to classic dengue symptoms that included spontaneous bleeding from the gums and a purpuric rash. His white blood cell count on admission was $3.1 \times 10^3/\mu\text{L}$ with a low platelet count of 2,000. On physical examination, gingival bleeding, scattered petechiae, and ecchymoses were observed (**Figures 1A, 1B, 1C and 1D**). Results of cardiorespiratory, gastrointestinal, and neurological examinations were normal. Chest radiography showed no pleural effusion and an abdominal ultrasound showed no free fluid in the cavity. The lowest platelet count ($1.0 \times 10^3/\mu\text{L}$) was reported from the seventh to ninth day of the illness.

Laboratory tests revealed positivity for immunoglobulin M (IgM) antibodies to dengue virus. Subsequently, treatment for thrombocytopenic purpura due to dengue was initiated. Hydrocortisone 500mg/day was administered intravenously for 6 days, and, prednisone 20mg/day, for an additional 10 days. Two days after initiating treatment, the bleeding stopped, and by the ninth day post-treatment, platelet count increased to 30,000 cells/mm³. The patient's hospital course was uncomplicated, he remained clinically well, and he was discharged with instructions to return for follow-up in the outpatient clinic. No spontaneous hemorrhagic events have occurred since, and platelet counts have remained within normal levels (**Figure 2 and Figure 3**).

Acute immune thrombocytopenia can be linked to underlying conditions like connective tissue disease, lymphoproliferative disease, immune-deficient states, and viral infections, or to medications administered¹⁻³. Thrombocytopenia associated with viral infection results from both lowered platelet production from megakaryocytes, and decrease in platelet half-life.

Conflict of interest

The authors declare that there is no conflict of interest.

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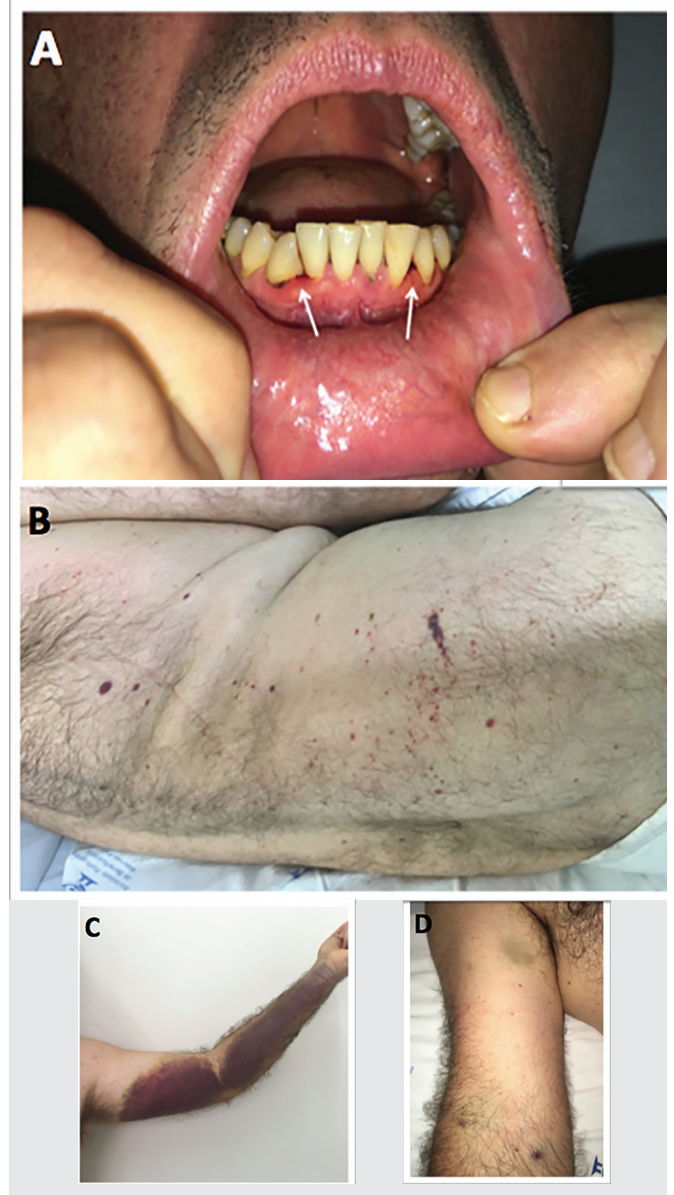


FIGURE 1 - Dengue fever. **A:** Acute gingival bleeding (white arrows). **B:** Scattered ecchymoses and petechiae. **C:** Hematoma on the left arm after blood pressure cuff inflation. **D:** Multiple ecchymoses on the right arm.

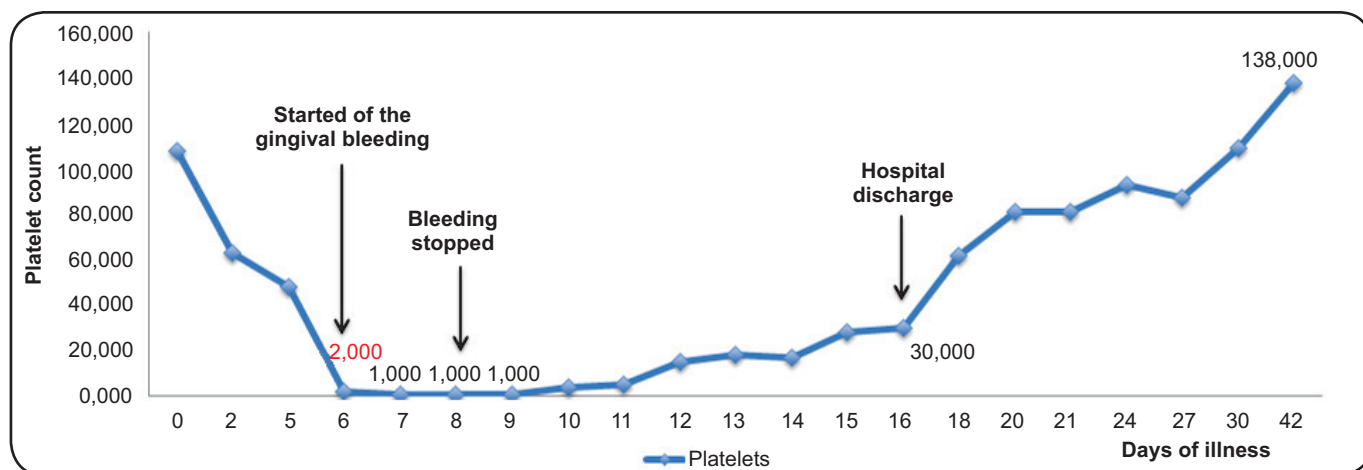


FIGURE 2 - Platelet counts during the clinical course.



FIGURE 3 - Disappearance of the hematoma as observed at the final follow-up.

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