Prominent Golgi Zone in Recovering Bone Marrow

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Dr Rahul Naithani declares that he has no conflict of interest. Dr Nitin Dayal declares that he has no conflict of interest.

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Case Report

A 72 year male with history of rheumatoid arthritis with multiple joint deformities was admitted with syncope and gastrointestinal bleeding. He was taking methotrexate and hydroxychloroquine since last 7 years. Perioral excoriation and petechial spots over palate were present. There was no fever, lymph node enlargement or splenomegaly. Patient was given 3 doses of G-CSF and referred for hematology consult. Complete blood count showed pancytopenia. Absolute neutrophil count was $0.06 \times 109/L$ and platelet count was $10 \times 109/L$. Red blood cells were normocytic normochromic with low reticulocyte count. Direct antiglobulin test was negative and LDH was normal.

Methotrexate was stopped. Bone marrow aspiration (Fig 1) and biopsy showed hypercellular marrow with normoblastic erythroid maturation. Myeloid precursors were increased in number with many promyelocyte with prominent Golgi zone. Normal or reactive promyelocytes were characterized by prominent paranuclear clear Golgi zones [1,2]. Megakaryocytes were adequate. No confluent blast aggregates or ALIP were seen. A diagnosis of methotrexate induced bone marrow suppression was made. Patient's neutrophil counts and platelets showed dramatic recovery the very next day of bone marrow examination and remained normal thereafter.

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.

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Figure Legend

Bone marrow showing prominent golgi zones in promyelocytes

