


Images in Clinical Hematology

Hemophagocytosis in acute myeloid leukemia



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A 63-year-old man with acute myeloid leukemia (AML) and treated with venetoclax and azacytidine, presented to the emergency department with fever, shortness of breath and gum bleeding. Laboratory evaluation showed pancytopenia; prolonged thrombin time with hypofibrinogenemia, elevated D-dimer and hyperferritinemia (29,000 $\mu\text{g/L}$). Bone marrow smear revealed blastic

infiltration with hemophagocytosis by histiocytes (panel A), macrophages (Panel B) and blasts (Panels C and D), (Figure 1).

Salvage chemotherapy was initiated, but the patient died 28 days after presentation. Hemophagocytic lymphohistiocytosis can be diagnosed in up to 10% of patients with AML,¹ and is associated with poor outcomes.^{1,2}

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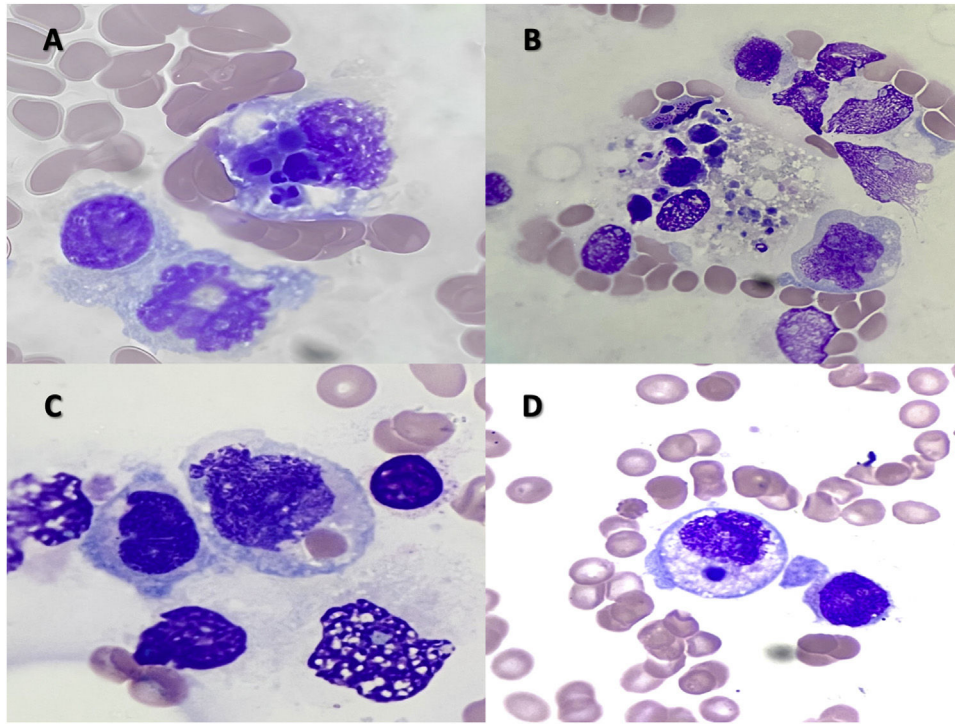


Figure 1. Bone marrow aspirate showing hemophagocytosis by (A) histiocytes, (B) macrophages and (C, D) infiltration with hemophagocytosis by monocytic blasts (Wright-Giemsa stain, 100x).

Conflicts of interest

The author declares no conflicts of interest.

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