Bone Marrow Necrosis - A rare clinicopathologic entity

Binay Kumar Shah,*a David M. Tretheway*b

*aConsultant Hematologist and Medical Oncologist, bConsultant Pathologist
St. Joseph Regional Medical Center, Lewiston ID USA

Figure 1. Bone marrow necrosis, ghost cells with acute inflammation and macrophages

CASE

A 76-year-old female presented to the hematology clinic for evaluation of new onset anemia and thrombocytopenia found on routine blood work. Her complaints were severe generalized body pain and easy bruising of approximately 4 weeks duration. She denied any fever or fatigue. On physical examination, she was hemodynamically stable and afebrile. There was no lymphadenopathy or hepatosplenomegaly.

Laboratory examination showed anemia with hemoglobin 7.9 gm/dl, platelet count of 28,000/ microliter, LDH 1187 u/liter, ferritin 13409 ng/ml and alkaline phosphatase 503 U/L. Peripheral blood smear showed 2% blasts with auer rods. Flow cytometry confirmed presence of myeloid blasts in the peripheral blood. Bone marrow aspiration yielded dry tap. Histopathology on bone marrow biopsy is shown below (figure). What is your diagnosis?

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