Hemophagocytic Lymphohistiocytosis Caused by Epstein-Barr Virus-associated Hodgkin Lymphoma

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ABSTRACT

We describe a unique hematologic syndrome, hemophagocytic lymphohistiocytosis (HLH), in a case of 80-year-old Thai female with Epstein-Barr virus (EBV)-associated Hodgkin lymphoma (HL). The patient presented with fever for 2 months and progressive jaundice for 2 weeks. Physical examination revealed marked anemia, jaundice, and hepatosplenomegaly. A complete blood count showed pancytopenia. Abdominal computed tomography revealed mild intrahepatic duct dilatation and splenomegaly. A bone marrow study revealed hypercellularity with increased histiocytes and hemophagocytic activity. The pathology of the liver exhibited multiple nodules comprising small lymphocytes, histiocytes, plasma cells, mature eosinophils and occasional isolated large atypical round cells resembling Hodgkin cells and Reed Sternberg (RS) cells. HL was further confirmed by the immunohistochemistry of the bone marrow and liver, and the in situ hybridization for EBV-encoded RNA (EBER) was positive in these cells. Her clinical condition gradually improved with intravenous immunoglobulin (IVIG), followed by high-dose dexamethasone. Unfortunately, the patient declined specific chemotherapy for HL, and finally died from central venous catheter-associated methicillin-resistant Staphylococcus aureus septicemia. (J Infect Dis Antimicrob Agents 2016;33:71-5.)

Keywords: Hodgkin lymphoma, hemophagocytic lymphohistiocytosis, Epstein-Barr virus, pancytopenia, jaundice

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