Images of Hematology

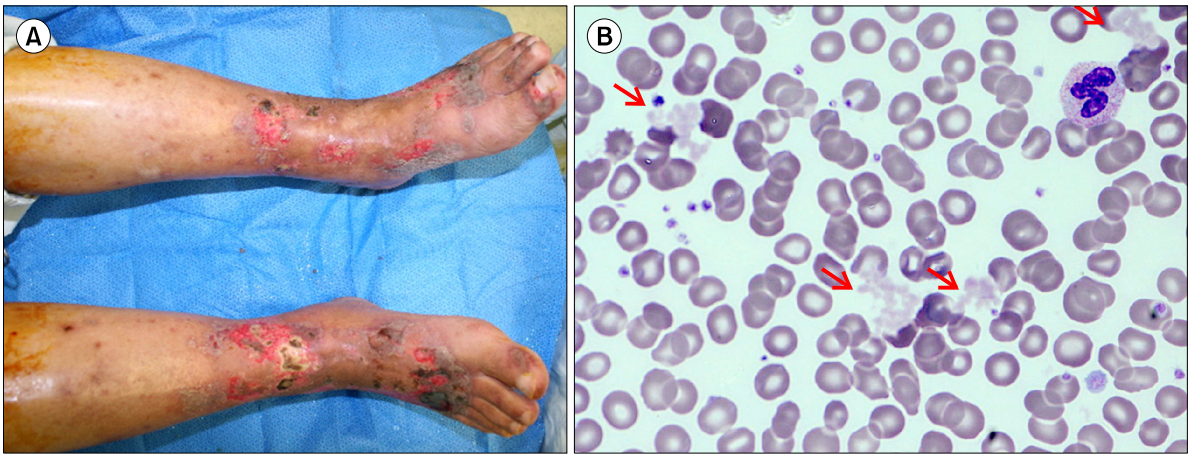
http://dx.doi.org/10.5045/kjh.2011.46.4.215

The Korean Journal of Hematology
Volume 46 · Number 4 · December 2011

Cryoglobulinemic vasculitis and monoclonal gammopathy in end-stage renal disease

Dahae Won[1], Chan Jeoung Park[1], Jai Won Chang[2]

Departments of [1]Laboratory Medicine, [2]Internal Medicine, Division of Nephrology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea



A 75-year-old man with a 2-year history of end-stage renal disease had skin lesions on both feet **(A)** for 2 weeks. The cause of end-stage renal disease remained to be clarified. Initial laboratory tests showed the following values: Hb level, 4.6 g/dL; leukocyte count, 4.6×10^9/L; and platelet count, 483×10^9/L. Peripheral blood (PB) smear showed extracellular aggregates of pink-tan acellular material **(B)**. We suspected cryoglobulinemia and performed the cryoglobulin test. The sampling was performed using a warmed syringe and a test tube. The patient was positive with a very high cryocrit level (37.02%). Immunofixation showed a monoclonal IgG kappa band in the gamma region. The patient was negative for hepatitis and HIV. Biopsy of the skin lesion showed leukocytoclastic vasculitis with subcorneal bulla. A subsequent bone marrow (BM) examination showed no evidence of clonal plasma cells (<2%). Flow cytometric analyses showed increased proportion of B cells (PB, 24.4%; BM aspirates, 25.5%) with no clonality. Cytogenetic study revealed normal karyotype of 46,XY. The patient was diagnosed with type I cryoglobulinemia with cryoglobulinemic vasculitis and monoclonal gammopathy. Treatment with methyl prednisolone improved his clinical response. Our data indicate that cryoglobulin could be easily detected by PB smear.