

中文題目：以雷諾氏現象為唯一初始表現之 IgG-kappa 型多發性骨髓瘤個案

英文題目：A case of IgG-kappa type multiple myeloma with the only initial manifestation of Raynaud's phenomenon

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## Abstract

Multiple myeloma is typically characterized by hypercalcemia, renal function impairment, bone pain, anemia, neurologic disease, or recurrent infection. We present a unique case of multiple myeloma, in which Raynaud's phenomenon was the only initial manifestation. The patient is a woman, who was robust in the past presented with intermittent discoloration of her fingertips and toes accompanied with painful sensation. Her symptoms worsened during winter. Physical examination revealed cyanosis with tenderness on the bilateral first toe and erythema on all fingertips. Normal pulsation on the radial and dorsalis pedis arteries and an elevated erythrocyte sedimentation rate (71 mm/h) were observed. Autoantibodies screening was negative for anti-nuclear antibodies, anti-RNP antibody, anti-SM antibody, anti-RO/LA, anti-double-stranded deoxyribonucleic acid, normal complement component 3, and complement component 4. Urinalysis results and spot urine protein/creatinine ratio were unremarkable. Raynaud's phenomenon with unknown etiology was the first impression. She underwent initial treatment with nifedipine combined with intravenous nitroglycerin and prostaglandin E1 for persistent symptoms. Her cyanosis, except that of her first toe, improved. Her left first toe was amputated owing to progressing gangrene complicated with refractory sepsis. Furthermore, we evaluated other etiologies of refractory Raynaud's phenomenon, and serum protein electrophoresis revealed monoclonality with immunoglobulin G kappa. The serum viscosity relative to water was 2.3. The amputated toe revealed necrotic tissue, which was negative for Congo red staining. Bone marrow biopsy revealed plasmacytosis (25%) in CD138-positive cells, which confirmed the diagnosis of multiple myeloma.