

## 면역 글로불린 A, 람다형 경쇄 및 중쇄 침착 신 질환에 동반된 다발성 골수종 1예

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### A Case of Light and Heavy Chain Deposit Disease (IgA, $\lambda$ : Lambda type) with Multiple Myeloma

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A 57 year old man has visited with a symptom of dizziness. He had neither history of medical illness with medication, nor surgery. Before visiting, he had a finding of renal insufficiency, refractory anemia, proteinuria, microscopic hematuria which had documented in previously checked health care exam. He had normal blood pressure range, heavy proteinuria about 25 g/day, azotemia creatinine 2.9 mg/dl, hyperkalemia serum K 6.0 mEq/l, normochromic, normocytic anemia Hb 7.5 g/dl. There is the result of elevated monoclonal  $\beta$  globulin, 59.6% (5.9 g/dl) of total protein, in his serum electrophoresis and monoclonal immunoprecipitate bands on IgA and lambda lane, with presenting another band in lambda lane in serum protein Immunofixation electrophoresis with compatible urine analysis findings. His bone marrow biopsy shows heavy infiltration of atypical plasma cells which are positive for CD138, Vs38 and lambda light chain, but negative for CD<sup>3</sup>, CD79a and Kappa light. In kidney biopsy with light- microscopy (PAS stain), tubular basement membranes are profoundly thickened, which are strongly PAS- and silver- . On Congo red staining, no birefringence is noted by polarizing microscopy. No "myeloma" casts are present. Fluorescented antisera to human IgG, IgA, IgM, C1q, C<sup>3</sup>, C<sup>4</sup>, fibrin, and kappa and lambda immunoglobulin light chains, are IgA (3+) and lambda light chain (4+) in a linear pattern. Electron microscopy all revealed thickened and slightly wrinkled capillary walls and basement membranes. Ultrastructural study reveals abundant deposits of flocculent to fibrillary electron dense material along the tubular basement membranes. Capillary walls are thickened with small amount of granular deposits in the inner side of basement membranes. So we can finally make a diagnosis of light and heavy chain deposit disease (IgA,  $\lambda$ : Lambda type) with multiple myeloma. Now we are presenting a very rare case.

**Key Words :** 면역글로불린, 침착질환, 다발성골수종

Immunoglobulin alpha- Chains, Immunoglobulin lambda- Chains, Mul