

혈액투석 환자에서 스테로이드 치료에 극적으로 반응한 원인 미상 열

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Fever of Unknown Origin Dramatically Responding to Steroid Therapy in a Patient Undergoing Chronic Hemodialysis

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Although fever in patients undergoing chronic hemodialysis (HD) has a diagnostic challenge because differential diagnosis includes additional etiologies, compared with general population, it is known that incidence of the true meaning of fever of unknown origin (FUO) in a patient undergoing chronic HD is extremely rare. We report chronic HD patient of FUO not responding to usual antibiotics and anti-fungal agents, but completely to prednisolone. 60-year-old Korean man visited our hospital because of intermittent fever and generalized ache starting 15 days before. He had been undergoing hemodialysis in private hemodialysis center for 2 year as diabetic end stage renal disease. His initial vital sign was as following; body temperature 39.5°C, blood pressure 130/80 mmHg, heart rate 103 times/minute, and respiratory rate 24 times/min. Her initial laboratory findings were as follows: WBC, 7,560/mm³ (PMN 78%); hemoglobin level, 7.7 g/dL; platelet count, 217×10³/mm³; ESR, 108 mm/hr; calcium, 7.8 mg/dL; phosphorus, 2.9 mg/dL; total protein, 6.2 g/dL; albumin, 2.7 g/dL; AST, 44 U/L; ALT, 46 U/L, total bilirubin, 1.12 mg/dL; C-reactive protein, 170.3 mg/L. Several autoimmune antibodies and antibody to tsutsugamushi, leptospira, and hantan virus were all negative. No bacteria were cultured on blood, sputum, urine, CSF, and bone marrow culture. Image study including enhanced CT of abdomen, chest, brain and bone scan did not show any lesions to induce fever. No vegetation was detected on transesophageal echocardiography. Liver and bone marrow biopsy did not reveal any malignant cell and tuberculosis. Intermittent fever to 39.5°C was detected on every day until admission 29th day although sequential antibiotics such as ceftriaxone, piperacillin plus tazobactam, vancomycin, tetracycline, meropenem, and fluconazole were administrated. On 30th day after admission, 60 mg of methyl-prednisolone was intravenously administered resulting in abrupt vanishment of fever and improvement of generalized conditions 18 hour after infusion. Prednisolone was tapered to 10 mg until recent 2 months and is undergoing hemodialysis without recurrence of fever and other symptoms and signs. Nephrologists should keep in mind that patient undergoing chronic hemodialysis can represent FUO without underlying etiologies and steroid be considered to resolve this when other etiologies were totally excluded.

Key Words: 원인미상열, 혈액투석, 말기신부전

Fever of unknown origin, Hemodialysis, End stage renal disease