S-E16

우리나라 다발성 골수종 환자들에서 신부전 발생의 위험 인자 및 치료 후 신기능 회복 예측 인자 분석

가톨릭대학교 의과대학 내과학교실

황현철, 고은실, 정성진, 박철휘, 양철우, 김용수, 장윤식, 신석준

Characteristics of Renal Insufficiency in Korean Multiple Myeloma Patients: Reversible factors from Renal Dysfunction

Hyun Chul Whang, Eun Sil Koh, Sungjin Chung, Cheol Whee Park
Chul Woo Yang, Yong Soo Kim, Yoon Sik Chang, Seok Joon Shin

Department of Internal Medicine College of Medicine
The Catholic University of Korea Seoul Republic of Korea

Introduction: Multiple myeloma (MM) is frequently accompanied by renal insufficiency which has been regarded as a poor prognosis factor for MM. It has been known that the incidence and characteristics of MM in Asia are different from those in western countries. The aim of this study is to evaluate risk factors of renal impairment and to investigate reversible factors from renal failure in patients with MM.

Methods: The patients newly diagnosed with MM from 2005 to 2008 at a single center in Korea were included. We investigated factors associated with renal insufficiency and those related to recovery from renal dysfunction after 12 week of treatment of MM.

Results: Renal insufficiency was recognized in 79 (36%) of 221 patients at the time of diagnosis of MM. When comparing characteristics between patients with renal insufficiency (n=79) and patients with normal kidney function (n=142), there were no significant differences in types of immunoglobulin and amounts of serum free light chains. In the binary logistic regression analysis, presence of diabetes (OR=4.12, p=0.02), β2-microglobulin level (OR=1.01, p=0.02) and serum calcium level (OR=1.936, p<0.01) were independence risk factors of renal failure in MM patients. After 12 weeks treatment, 24 (30%) of 79 patients with renal insufficiency recovered normal renal function. No improvement of renal function was seen mainly in patients with male gender, IgA type MM, high β2-microglobulin level, increased 24 hour urine protein excretion and poor response to chemotherapy. In the binary logistic regression analysis, only good response to chemotherapy (OR=4.9, p<0.01) was associated with renal function recovery.

Conclusion: Diabetes, β2-microglobulin and amount of urine protein were independent risk factor for development of renal failure in Korean MM patients, and the response to chemotherapy significantly influenced recovery of renal function.

Key Words: 다발성 골수종, 신부전, 위험 인자
Multiple myeloma, Renal failure, Risk Factor