

중양의 예후인자로서 신손상이 미치는 영향

가천의과학대학교 내과학교실¹, 가천의대길병원 인공신장실²

나선영¹ · 성지윤¹ · 정명옥² · 박노옥² · 장제현¹ · 김세중¹ · 이현희¹ · 정우경¹ · 정지용¹

Impact of Renal Dysfunction on Overall Mortality in Cancer Patients

Na Sun Young¹, Sung Ji Yoon¹, Jeong Myeong Ok², Park No Ok²
Chang Jae Hyun¹, Kim Sejoong¹, Lee Hyun Hee¹, Chung Wookyung¹, Jung Ji Yong¹

Department of Internal Medicine¹ Gachon University of Medicine and Science
Artificial Kidney² Unit Gachon University Gil Hospital

Background: Patients with renal dysfunction are at increased risk for cardiovascular and all-cause mortality. The effects of renal dysfunction on the risk of death with malignant disease are uncertain. The aim of this study is to determine the association between estimated glomerular filtration rate (eGFR) and overall mortality in cancer patients.

Methods: In this retrospective study, we identified 8223 cancer patients with 1 or more in and outpatient serum creatinine measurements from January 1, 2000 to December 31, 2004. We estimated glomerular filtration rate using the abbreviated Modification of Diet in Renal Disease equation. Cox's proportional hazards models adjusted for age, gender, diabetes, hypertension, proteinuria, serum hemoglobin and albumin level.

Results: A total of 1,051 (12.8%) patients had renal dysfunction (baseline eGFR less than 60 ml/min/1.73m²). Lower eGFR was associated with increased risk of death in cancer patients. The adjusted hazard ratios were 1.17 with an eGFR of 30 to 59 ml/min/1.73m² (95% confidence interval 1.04–1.31, p=0.01), 2.21 with an eGFR of less than 30 ml/min/1.73m² (95% confidence interval 1.74–2.79, p<0.001), compared to patients who had eGFR more than 60 ml/min/1.73m².

Conclusion: The prevalence rate of renal dysfunction was 12.8% in cancer patients and higher than general population. The risk of death with cancer was greater at lower eGFRs. This association may contribute to excess mortality in cancer patients with renal dysfunction. Therefore, nephrologists should be aware of renal dysfunction as a predictor of mortality and should make efforts to preserve renal function in cancer patients.

Key Words: 중양, 신손상, 사망률

Cancer, Renal Dysfunction, Mortality