

종양의 예후인자로서의 신손상이 미치는 영향

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Impact of Renal Dysfunction on Cancer Outcomes

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Background : Renal dysfunction (RD) has been shown to be one major risk factor in a number of disease and is associated with a dismal clinical outcome. However, the influence of milder degrees of renal disease is less well defined, particularly not in patients with malignant disease. The aim of study was to detect the impact of different RD on cancer outcome.

Methods : In this retrospective study, we determined 8286 in and out patients with all types of cancer, at least once over the period, aged ≥ 18 years using electronic records from Jan. 2000 to Dec. 2004. We analyzed RD [estimated glomerular filtration rate (eGFR) by modification of diet in renal disease (MDRD) < 60 ml/min/1.73 m²] and other prognostic factors to ascertain their value on overall survival (OS).

Results : Among 8,286 patients (4,190 males and 4096 females: median age 57 years; inter-quartile range 45–67), 313 (3.8%) kidney and urinary tract cancer, 7667 (92.5%) other solid organ cancer and 306 (3.7%) hematologic malignancy, 1,081 (13.0%) patients had RD. The 5-year cumulative survival rate was 82.5% (non-RD vs. RD: 84.3% vs. 61.2%, $p < 0.001$ by log rank test). Hazard ratio of RD 1 ($30 \leq \text{MDRD eGFR} < 60$) and RD 2 (MDRD eGFR < 30) were 2.3 (1.77–2.99) and 4.9 (3.13–7.70), respectively. After adjusting for age and gender, RD was a strong predictor of all-cause mortality.

Conclusion : These findings demonstrate that RD is frequent in cancer patients and one of important prognostic factor. Also, nephrologists should be aware of RD as a predictor of mortality and should make efforts to preserve renal function in cancer patients.

Key Words : 신손상, 종양, 예후인자

Renal dysfunction, Cancer, Outcome