

암환자에서 만성 신병증의 빈도

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Chronic Kidney Disease Prevalence in Cancer Patients

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Objectives : Comorbid conditions in cancer patients can influence both clinical eligibility for treatment and mortality. Renal dysfunction is one of the important risks, but the influence of renal impairment has not been well defined.

Methods : This retrospective study reviewed 3769 patients who were classified according to the diagnostic code, as C-code in ICD-10, and visited the Seoul National University Bundang Hospital at least once in 2004. Patients aged 18 years or more were included. We investigated the prevalence of chronic kidney disease (CKD) and the changes in renal function in cancer patients. Glomerular filtration rate (GFR) was calculated based on serum creatinine (sCr) using the Modification of Diet in Renal Disease formula. CKD was defined as an estimated GFR (eGFR) of less than 60 ml/min/1.73m² and deterioration of renal function was defined as a final to initial sCr ratio >1.5.

Results : The study sample consisted of 3716 patients (2,078 males; mean age, 58.8±14.1 years) and we divided all patients according to the lists of 10 most common cancers of Korea. There were as follows; gastric, thyroid, colorectal, lung, liver, breast, prostate, gall bladder and biliary, pancreas, cervix cancer and other. At the time of diagnosis, 82.1% of the patients had sCr, 61.6% had systolic BP, 82.8% had hemoglobin, 82.3% had cholesterol and 65.3% had urine albumin (u-alb) data. The frequency of each u-alb grade was as follows; 0, 1960 (52.7%); trace, 187 (5.0%); 1+, 177 (4.8%); 2+, 64 (1.7%); 3+, 37 patients (1.0%). When dividing all patients according to eGFR group, the frequency of each eGFR group was as follows; eGFR<45 ml/min/1.73 m², 104 (2.8%); 45-59, 245 (6.6%); 60-89, 1783 (48.0%); 90-119, 683 (18.4%); ≥120, 109 patients (2.9%). The number of patients whose renal function was deteriorated in each eGFR group was as follows; eGFR<45 ml/min/1.73m², 11 (10.6%); 45-59, 22 (9.0%); 60-89, 96 (5.4%); 90-119, 69 (10.1%); ≥120, 37 patients (33.9%). The initial eGFR is an independent risk factor for deterioration of renal function.

Conclusion : The cancer patients had a higher prevalence of CKD than general population did (12.56% vs 5.07%) and the frequency of renal deterioration was more common in moderate renal impairment and hyperfiltration group.

Key Words : 유병률, 만성신병증, 암

Prevalence, Chronic kidney disease, Cancer