

The Chronic Kidney Disease in Subjects Having a Health Check-up from 39 Hospitals in Korea

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Purpose :The prevalence of end stage renal disease and chronic kidney disease (CKD) is increasing in Korea. This study nationalwidely surveyed the prevalence and the associated disorders of CKD among subjects having a health check-up in general hospitals.

Methods :We included 329,581 adults aged more than 18 years who had a health check-up from 39 Korean hospitals in 2005. We selected the K/DOQI guidelines for the diagnosis of CKD and the modified MDRD equation to estimate the glomerular filtration rate (eGFR).

Results :The eGFR (mean; 83.1 ml/min/1.73m²) was decreased with aging by the rate of 4.96 [(ml/min/1.73m²)/5 years] from 18 to 30 years and by 1.61 [(ml/min/1.73m²)/5 years] after 30 years. The prevalences of CKD stage 1, 2, and more than 3 were 1.39%, 3.64%, and 2.67%, respectively. Significant increase of proportion of CKD in the group over age 60 yrs were founded. The CKD was associated with typical disorders of hypertension, hyperuricemia, and anemia. The frequency of hypertension or hyperuricemia was gradually increased along with increase of CKD stage. The risk factors related to CKD stage more than 3 were age, gender (female), hyperuricemia, body mass index, serum cholesterol, hematuria and proteinuria.

Conclusions :The mean eGFR of subjects having a health check-up in Korea was lower than Western people. The prevalence of CKD stage more than 3 was 2.67% in this survey.