

조기 만성 콩팥병 환자들에게서 관찰되는 내분비-대사 이상

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Endocrine-Metabolic Disorders in Patients with Chronic Kidney Disease

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Endocrine-metabolic disorders are common in patients with chronic kidney disease. Several studies showed that the prevalence of endocrine-metabolic disorders is increased in patients with chronic kidney disease, and that could have important role in the prognosis of chronic kidney disease. In this study, we investigated that the prevalence of endocrine-metabolic disorders in healthy person according to the renal function.

We retrospectively reviewed 948 adults recruited from health promotion center at Chung-Ang University Hospital. Age, sex, height, weight, waist circumference, blood pressure, fasting glucose, lipid profile, serum creatinine and bone mineral density were evaluated. The glomerular filtration rate (GFR) was estimated by the Modification of Diet in Renal Disease (MDRD) formula. Decreased renal function was defined as estimated GFR under 60 ml/min/1.73m² and metabolic syndrome was defined by International Diabetes Federation (IDF) 2006 criteria.

The mean age was 47.7±9.3 years in men (276, 29.1%) and 50.8±9.7 years in women (672, 70.9%). There are 918 persons with normal renal function and 30 persons with decreased renal function. The prevalence of metabolic syndrome and osteoporosis were 13.8% (10.1% in men, 11.1% in premenopausal women and 27.0% in postmenopausal women) and 14.2% (9.8% in men, 11.1% in premenopausal women and 29.8% in postmenopausal women), respectively. The percentages of persons with metabolic syndrome and osteoporosis were increased in persons with decreased renal function (p=0.002 and 0.0048). Subgroup analysis was conducted for men, premenopausal women and postmenopausal women groups. In premenopausal women, we could find similar results, but in men and postmenopausal women, we couldn't find the difference of prevalence between persons with normal renal function and persons with decreased renal function.

Metabolic syndrome and osteoporosis were increased in persons with decreased renal function in premenopausal women. However, there were no association between endocrine-metabolic disorders and decreased renal function in men and postmenopausal women.

Key Words: 만성 콩팥병, 대사증후군, 골다공증

Chronic kidney disease, Metabolic syndrome, Osteoporosis