

제 2형 당뇨병환자에서 내장 지방량 및 피하지방량과 신기능과의 관계

가톨릭대학교 의과대학 내과학교실

유지한 · 김용균 · 이성수 · 김성래 · 유순집 · 송호철 · 양철우 · 김용수 · 최의진

Relationship of Visceral and Subcutaneous Adiposity with Renal Function in Patients with Type 2 Diabetes Mellitus

Jihan Yu, Yong Kyun Kim, Seong Su Lee, Sung Rae Kim

Soon Jib Yoo, Ho Cheol Song, Chul Woo Yang, Yong-Soo Kim, Euy Jin Choi

Department of Internal Medicine College of Medicine The Catholic University of Korea

Background: Obesity and diabetes mellitus (DM) were risk factors for the development of chronic kidney disease. Visceral (VAT) and subcutaneous adiposity (SAT) may be associated with differential metabolic risk. Our study was performed to determine whether VAT or SAT were associated with the deterioration of renal function in people with type 2 DM.

Methods: Nine hundred and twenty-nine people with type 2 DM (488 women and 441 men), who had underwent abdominal computed tomography assessment of SAT and VAT area, were included in our study. Estimated GFR was calculated using the Modification of Diet in Renal Disease four-variable equation at the time of the assessment of SAT and VAT area.

Results: The mean visceral fat area was 118 ± 56 Cm² in women and 126 ± 65 Cm² in men. The mean subcutaneous fat area was 192 ± 79 Cm² in women and 124 ± 66 Cm² in men. Visceral fat area was independently associated with eGFR after adjustment for age, sex, duration of diabetes, systolic blood pressure, diastolic blood pressure, serum triglyceride, HOMA-IR, uric acid and urinary albumin excretion (β -coefficient = -0.075 , $p=0.034$), while body mass index, total fat area and subcutaneous fat area were not significantly associated with eGFR.

Conclusion: We found that VAT was associated with deterioration in renal function in people with type 2 DM. Measurement of VAT may be helpful to predict the deterioration of renal function in people with type 2 DM.

Key Words: 비만, 당뇨, 사구체 여과율

Obesity, Diabetes mellitus, Glomerular filtration r