**Creatinine Clearance in Patients with Obstructive Sleep Apnea**

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*The authors have no conflict of interest*

*Running title: Creatinine clerance in OSA*

*This study was presented as an oral presentation in National Lung Health Congress,Antalya Turkey,2018*

OBJECTIVE: During an apnea, hemodynamic complications such as hypoxemia, a rise in systemic and pulmonary arterial pressure, and changes in heart rate occur in patients with obstructive sleep apnea (OSA). In patients with OSA, hypertension is common. This study aims to assess OSA patients' renal functions and investigate the creatinine clearance (CC) values across OSA patients with and without hypertension.

MATERIAL-METHOD: The study included 530 individuals with OSA and 60 individuals with an apnea-hypopnea index (AHI) of <5. Age, body weight, height, and urea and creatinine levels were retrospectively assessed through patients' medical files. CC was calculated with the Cockcroft-Gault Equation. Patients with OSA were divided into two groups as the group of patients with hypertension (HT) (group 1) and without HT (group 2).

RESULTS: The study included 339 (64%) male and 191 (36%) female patients. We found out that 32.4% of OSA patients had HT (Group 1). There was a significant difference in CC and urea levels between groups 1 and 2 (p<0.001; p=0.005). While CC was low in the OSA group, CC values were not statistically significantly different between the OSA patients and the control group (p>0.05). A statistically significant difference was detected in urea and creatinine levels between the OSA and control groups (p=0.005; p=0.012).

CONCLUSION: Creatinine clearance decreases in patients with OSA in the presence of HT. Patients with OSA often experience cardiovascular disorders and glomerular endothelial dysfunction occurs in OSA patients.

Keywords: obstructive sleep anpea, creatinine clerance, hypertension , complication