

Abstract Type : Oral

Abstract Submission No. : OR-1357

No Association Between Pre-Kidney Transplant Obesity and Risk for Post-Transplant Cerebrovascular Accident

Ekamol Tantisattamo¹, Busara Songtanin², Chawit Lopimpisuth², Sakditad Saowapa³, Natnicha Leelaviwat³, Natchaya Polpichai⁴, Possawat Vutthikraivit⁵

¹Department of Division of Nephrology, Hypertension, and Kidney Transplantation, Department of Medicine, University of California Irvine School of Medicine, United States

²Department of Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

³Department of Faculty of Medicine Ramathibodi Hospital, Mahidol University, Thailand

⁴Department of Faculty of Medicine Songklanagarin Hospital, Prince of Songkla University, Thailand

⁵Department of Phramongkutklao College of Medicine, Mahidol University, United States

Objectives: Obesity is a common risk factor for cardiovascular diseases including stroke. This association among kidney transplant recipients is unclear. This study aims to determine association between pre-transplant obesity and stroke after kidney transplantation.

Methods: A single center case-control study including kidney transplant recipients with new-onset stroke matched with their controls who had no stroke based on age and date of kidney transplantation identified at the same time when the first episode of stroke of each case occurred (incidence density sampling method). Stroke was diagnosed by abnormality on the brain MRI with focal neurological deficit. Obesity is defined as body mass index (BMI) ≥ 30 kg/m².

Results: A total of 5 patients with new onset of stroke and 15 controls were obtained during a 2-year follow-up period. Mean age \pm SEM was 45.49 \pm 2.76 years. In case group, 60% was male and African American; whereas, 53.33% was female and 40% was African American in the control group. Obese patients had 6.4 times greater the odd of having stroke than non-obese patients (odd ratio (OR) 6.4, 95% CI 0.547 to 74.891). The association becomes attenuated but still non-statistically significant after adjusted for potential confounders (adjusted OR 1.856, 95% CI -0.603 to 4.316).

Conclusions: Kidney transplant recipients remains at increased risk for stroke. Obesity appears to be associated with an increased risk of stroke in this population; however, our results are limited with study power. Weight should be controlled during pre-transplant period.