

ISN Trial-List - May 2017

Chronic Kidney Disease

Sodium Restriction in Patients With CKD: A Randomized Controlled Trial of Self-management Support

Meuleman, et al. Am J Kidney Dis. 2017;69(5):576-586

A reduction in sodium intake is an important but often elusive goal for patients with CKD. This multicentre study randomized 151 patients with CKD to a 3-month structured support intervention designed to foster a self-managed reduction in dietary sodium intake. When compared to the control group at 3-months the intervention group showed a 30mmol/day reduction in sodium excretion and significant reduction in diastolic blood pressure and proteinuria. At 6 months, the differences in sodium excretion and BP were not maintained, although the reduction in proteinuria persisted. This study demonstrates the impact of dietary interventions on important renal and cardiovascular risk factors but also highlights the challenges in promoting durable changes in lifestyle.

Transplantation

Safety and Efficacy Outcomes 3 Years After Switching to Belatacept From a Calcineurin Inhibitor in Kidney Transplant Recipients: Results From a Phase 2 Randomized Trial

Grinyo, et al. Am J Kidney Dis. 2017;69(5):587-594

Conversion from calcineurin inhibitor to co-stimulation blocker belatacept has been shown to result in improvement in renal function out to 2-years. Here Grinyo, et al. present the 3-year outcomes of their trial randomizing kidney transplant recipients to belatacept or continued use of calcineurin inhibitor at 6-36 months post-transplant. They found that the approximately 7ml/min/1.73m² gain in eGFR seen at 2 years was maintained at 3-years. Notably, there was no difference in serious infections or malignancy (including no cases of post-transplant lymphoproliferative disorder). This study helps to solidify the role of belatacept as a useful agent in selected kidney transplant recipients.

General Medicine

Effect of Magnesium Oxide Supplementation on Nocturnal Leg Cramps: A Randomized Clinical Trial

Maor, et al. JAMA Intern Med. 2017;177(5):617-623

Nocturnal leg cramps are a frequent complaint among elderly patients with CKD but evidence-based therapies are few. This study of 94 older individuals with a history of frequent leg cramps randomized participants to magnesium oxide or matching placebo. Individuals with a creatinine over 2.0mg/dL were excluded. Over the four-week treatment period both groups experienced a reduction in leg cramps with no intervention effect apparent. This study challenges the commonly accepted use of magnesium for leg cramps and emphasises the importance of a placebo arm in studies with patient reported outcomes.