ISN Trial List - April 2017

CKD

Tacrolimus Monotherapy after Intravenous Methylprednisolone in Adults with Minimal Change Nephrotic Syndrome. *Li, et al. J Am Soc Nephrol 2017;28(4):1286-1295*

Li, et al. randomized 119 adult patients with treatment naïve patients with minimal change disease and nephrotic syndrome to glucocorticoids or tacrolimus. Both groups initially received 10 days of intravenous methylprednisolone. There was no difference in rates of remission or relapse between groups. Adverse events were more common in the glucocorticoid group. Is tacrolimus a less toxic alternative to steroids for inducing remission in MCN?

http://jasn.asnjournals.org/content/early/2016/11/02/ASN.2016030342.abstract

AKI

Prophylactic hydration to protect renal function from intravascular iodinated contrast material in patients at high risk of contrast-induced nephropathy (AMACING): a prospective, randomised, phase 3, controlled, open-label, non-inferiority trial. *Nijssen, et al. Lancet. 2017;389(10076):1273-1368*

Nijssen, et al. randomised 660 patients with CKD3 (eGFR 30-59ml/min/1.73m^2) undergoing intravascular contrast administration to intravenous hydration with isotonic saline or no hydration. In this predominantly outpatient group, intravenous hydration was not associated with a reduction in contrast nephropathy. This study challenges conventional wisdom regarding the value of hydration in preventing CIN

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30057-0/abstract

Dialysis

Exercise in Patients on Dialysis: A Multicenter, Randomized Clinical Trial. *Manfredini, et al. J Am Soc Nephrol 2017;28(4)1259-1268*

In this randomized multicentre trial, 296 haemodialysis patients were allocated to a personalized walking exercise program delivered by dialysis staff or to control. At 6 months, those provided with the exercise program saw a significant increase in 6-minute walking distance and five times sit-to-stand time. They also demonstrated improvement in the cognitive function and quality of social interaction as measured by KDQOL-SF. The trial suggests that regular exercise might be a simple yet effective way of improving important outcomes for people receiving haemodialysis

http://jasn.asnjournals.org/content/early/2016/11/30/ASN.2016030378.abstract

Hypertension

Quarter-dose quadruple combination therapy for initial treatment of hypertension: placebo-controlled, crossover, randomised trial and systematic review. *Chow, et al. Lancet 2017;389(10073):983-1074*

This double-blind crossover trial of a hypertension polypill containing a quarter dose of four antihypertensives (atenolol, hydrochlorothiazide, amlodipine and irbesartan) involved 21 patients with untreated hypertension. A significant placebo-corrected reduction in 24-hr systolic blood pressure of 19mmHg was seen at completion of the 4 week treatment phase. If the dramatic BP effects seen in this trial are confirmed, we may need to rethink our approach to the initial management of hypertension

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)30260-X/abstract

Low-dose eplerenone decreases left ventricular mass in treatment-resistant hypertension. *Schneider, et al. J Hypertens 2017;35(5):1086–1092*

In this study of 51 patients with treatment resistant hypertension. Those randomized to eplerenone (50mg) had a significant reduction in left ventricular mass (LVM) at 6 months. Those in the placebo group did not show a change in LVM despite experiencing a similar improvement in blood pressure

control. The trial supports the possibility that there is a BP independent mechanism by which aldosterone antagonism reduces LVH
http://journals.lww.com/jhypertension/Abstract/2017/05000/Low_dose_eplerenone_decreases_left_ventricular.26.aspx

General population trials:
Rivaroxaban or Aspirin for Extended Treatment of Venous Thromboembolism. *Weitz, et al. N Engl J Med 2017; 376:1211-1222*
This trial randomized 3365 patients who had completed 6-12 months of oral anticoagulation for venous thromboembolism (VTE) to continuing therapy with daily rivaroxaban or low-dose aspirin. Rivaroxaban was associated with a significantly reduced risk of recurrent venous thromboembolism. Should anticoagulation duration for VTE be extended, perhaps at a lower dose?
http://www.nejm.org/doi/full/10.1056/NEJMoa1700518