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IN BRIEF

DIABETES

Two risk prediction models identify patients at risk of NODAT

The performance of two models to predict new-onset diabetes after transplantation (NODAT) has been analyzed in 191 kidney recipients with at least 1-year follow-up after transplantation. The areas under the receiver operating characteristic curve for the Framingham Offspring Study–Diabetes Mellitus algorithm and San Antonio Diabetes Prediction Model to predict NODAT were 0.756 and 0.807, respectively. Patients in the top quartile of both scores had a significantly increased risk of NODAT. As well as having good discrimination, both models were well calibrated to predict NODAT.

Original article Rodrigo, E. *et al.* Prediction at first year of incident new onset diabetes after kidney transplantation by risk prediction models. *Diabetes Care* doi:10.2337/dc11-2071

GENETICS

Mutations in *KLHL3* and *CUL3* are linked to electrolyte abnormalities and hypertension

With the use of exome sequencing, investigators have identified a link between mutations in kelch-like 3 (*KLHL3*) and cullin 3 (*CUL3*) and hypertension and electrolyte abnormalities in patients with pseudohypoaldosteronism type II. These proteins are thought to have a role in the regulation of salt and electrolyte homeostasis in the distal nephron. The researchers suggest that mutations in *KLHL3* and *CUL3* might abrogate ubiquitination of *KLHL3* targets, thus disrupting normal electrolyte handling in response to a physiological challenge.

Original article Boyden, L. M. *et al.* Mutations in kelch-like 3 and cullin 3 cause hypertension and electrolyte abnormalities. *Nature* 482, 98–102 (2012)

CHRONIC KIDNEY DISEASE

Ergocalciferol delays the onset of secondary hyperparathyroidism in children with chronic kidney disease

Results from a randomized, placebo-controlled study indicate that ergocalciferol is safe and effective in delaying the onset of secondary hyperparathyroidism in children with stage 2–3 chronic kidney disease (CKD) and vitamin D deficiency. Nine of 20 children on placebo and three of 20 children on ergocalciferol developed hyperparathyroidism after a median follow-up of 12 months. Normal levels of vitamin D were maintained in 88% of children with stage 2 CKD, but only in 45% of children with stage 3 CKD.

Original article Shroff, R. *et al.* Ergocalciferol supplementation in children with CKD delays the onset of secondary hyperparathyroidism: a randomized trial. *Clin. J. Am. Soc. Nephrol.* doi:10.2215/CJN.04760511

ACUTE KIDNEY INJURY

Role of equilibrative nucleoside transporter 1 in AKI

Crosstalk between equilibrative nucleoside transporter 1 (ENT1) and adenosine receptors has a role in regulating postischemic blood flow during acute kidney injury (AKI). Inhibition of ENTs in mice exposed to ischemic AKI led to an increase in adenosine levels and kidney protection. The attenuation of adenosine transport through Ent1 involves the adenosine receptor Adora2b, which contributes to the prevention of the renal no-reflow phenomenon.

Original article Grenz, A. *et al.* Equilibrative nucleoside transporter 1 (ENT1) regulates postischemic blood flow during acute kidney injury in mice. *J. Clin. Invest.* 122, 693–710 (2012)