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IN BRIEF

TRANSPLANTATION

Nox2 mediates CNI-induced nephrotoxicity

Inhibition of Nox2 might protect against calcineurin inhibitor (CNI)-induced nephrotoxicity after transplantation, say researchers. Djamali *et al.* found that Nox2 levels and epithelial-to-mesenchymal transition were increased in NRK52E cells treated with CNIs. Administration of ciclosporin to rats increased tubulointerstitial Nox2 expression; inhibition of Nox2 was associated with reduced fibrogenesis. Nox2 was also increased in kidneys of 15 liver transplant recipients with CNI-induced nephrotoxicity.

Original article Djamali, A. *et al.* Nox2 is a mediator of chronic CSA nephrotoxicity. *Am. J. Transplant.* doi:10.1111/j.1600-6143.2012.04081.x

ACUTE KIDNEY INJURY

AKI recovery associated with incident CKD stage 3

A retrospective cohort study has revealed an association between recovery of kidney function after an episode of acute kidney injury (AKI) in patients with normal baseline kidney function and increased risk of incident chronic kidney disease (CKD) stage 3. Over a median follow-up of 2.5 years, 15% of patients with complete recovery of kidney function after an episode of AKI and 3% of control patients developed incident CKD stage 3 (adjusted HR 3.82; 95% CI 2.81–5.19). Recovery from AKI was not associated with all-cause mortality, however.

Original article Jones, J. *et al.* Association of complete recovery from acute kidney injury with incident CKD stage 3 and all-cause mortality. *Am. J. Kidney Dis.* doi:10.1053/j.ajkd.2012.03.014

PEDIATRICS

ABPM for children with CKD

Ambulatory blood pressure monitoring (ABPM) should be used to monitor risk and guide therapy in children with chronic kidney disease (CKD), according to the Chronic Kidney Disease in Children Study Group. The researchers measured casual and ambulatory blood pressure in 332 children; children who had a 2.25-fold increase in their urinary protein:creatinine ratio over 1 year had a 39% greater risk of having an abnormal ABPM result. Use of an angiotensin-converting-enzyme inhibitor was associated with an increased likelihood of having a normal blood pressure as assessed by ABPM.

Original article Samuels, J. *et al.* Ambulatory blood pressure patterns in children with chronic kidney disease. *Hypertension* doi:10.1161/HYPERTENSIONAHA.111.189266

TRANSPLANTATION

A urinary signature for renal allograft fibrosis

Measurement of mRNAs in urinary cells may enable the noninvasive diagnosis of renal allograft fibrosis, according to new research. Anglicheau and colleagues examined mRNA levels in urine specimens from 114 renal allograft recipients (48 with renal fibrosis and 66 without). They developed a four-gene model that predicted the presence of allograft fibrosis with a sensitivity of 77.3% and a specificity of 87.5% in an independent validation subset.

Original article Anglicheau, D. *et al.* Discovery and validation of a molecular signature for the noninvasive diagnosis of human renal allograft fibrosis. *Transplantation* doi:10.1097/TP0b013e31824ef181