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IN BRIEF

HYPERTENSION

AT, receptors might protect the kidney during hypertension

Type 1 angiotensin (AT $_1$) receptors on T cells might protect the kidney from damage during hypertension by modulating CD4+ T-helper (T $_H$) cell differentiation, according to recent findings. Researchers found that hypertensive mice that did not express AT $_1$ receptors on T cells had aggravated kidney injury and an accumulation of T cells in the kidney. Further analysis revealed that these T cells expressed high levels of T $_H$ 1-associated cytokines (including IFN- γ and TNF) and the T-box transcription factor TBX21 (also known as T-bet), which promotes differentiation of T $_H$ 1 cells. Mice that were unable to induce a T $_H$ 1 response were protected from kidney injury in this mouse model.

Original article Zhang, J. D. *et al.* A novel role for type 1 angiotensin receptors on T lymphocytes to limit target organ damage in hypertension. *Circ. Res.* doi:10.1161/CIRRESAHA.111.261768

PRE-ECLAMPSIA

New method to detect podocyturia in pre-eclampsia

Liquid chromatography coupled with tandem mass spectrometry has been shown to effectively identify podocyturia (that is, urinary loss of viable podocytes) through the detection of a podocin-specific tryptic peptide. This technique accurately identified podocyturia in the urine of 13 patients with pre-eclampsia. The researchers suggest that this operator-independent approach could act as a diagnostic tool for pre-eclampsia and potentially as a marker of active renal disease.

Original article Garovic, V. D. *et al.* Mass spectrometry as a novel method for detection of podocyturia in pre-eclampsia. *Nephrol. Dial. Transplant.* doi:10.1093/ndt/gfs07

TRANSPLANTATION

Renal retransplanation resolves recurrent primary FSGS

Focal segmental glomerulosclerosis (FSGS) recurs in approximately 40% patients following renal transplantation. Gallon et al. report on the successful retransplantion of a renal allograft that was failing in the first recipient owing to recurrent primary FSGS. Despite plasmapheresis, the patient developed marked proteinuria from day 2 following transplantation; the renal allograft was removed and successfully retransplanted into a 66-year-old man with diabetic kidney disease on day 14. The allograft immediately regained function. Allograft biopsies performed after retransplantation showed reversal of histopathologic lesions.

Original article Gallon, L. *et al.* Resolution of recurrent focal segmental glomerulosclerosis after retransplantation. *N. Engl. J. Med.* **366**, 1648–1649 (2012)

DIABETES

Treatments for type 2 diabetes do not affect renal function

A clinical trial of 699 children and adolescents (aged 10–17 years) with recent-onset type 2 diabetes has found that combined treatment with metformin and rosiglitazone is superior to treatment with metformin alone or metformin plus a lifestyle-intervention program in maintaining glycemic control. No adverse renal effects, including microalbuminuria, hypertension and renal impairment, were reported during the trial.

Original article TODAY Study Group. A clinical trial to maintain glycemic control in youth with type 2 diabetes. *N. Engl. J. Med.* doi:10.1056/NEJMoa1109333