

## IN BRIEF

## ATRIAL FIBRILLATION

Atrial fibrillation is prevalent in dialysis patients and is associated with significantly increased risk of ischemic stroke and mortality, according to new findings. Vazquez and colleagues found that of 256 patients starting dialysis, 31 had atrial fibrillation and 28 developed atrial fibrillation during a mean follow-up of 2 years. The presence of atrial fibrillation was associated with an increased risk of ischemic stroke and mortality.

**Original article** Vazquez, E. *et al.* Atrial fibrillation in incident dialysis patients. *Kidney Int.* **76**, 324–330 (2009).

## RENAL FIBROSIS

The intermediate-conductance  $\text{Ca}^{2+}$ -activated  $\text{K}^+$  channel ( $\text{K}_{\text{Ca}}3.1$ ) might be involved in renal fibroblast proliferation and fibrogenesis and could be a target for the treatment of renal fibrosis. Grgic *et al.* found that the induction of renal fibrosis by unilateral ureteral obstruction in mice was associated with increased  $\text{K}_{\text{Ca}}3.1$  expression and that administration of a  $\text{K}_{\text{Ca}}3.1$  antagonist attenuated progression of renal fibrosis. Mice deficient in  $\text{K}_{\text{Ca}}3.1$  also had reduced fibrotic marker expression and tubulointerstitial damage after unilateral ureteral obstruction.

**Original article** Grgic, I. *et al.* Renal fibrosis is attenuated by targeted disruption of  $\text{K}_{\text{Ca}}3.1$  potassium channels. *Proc. Natl Acad. Sci. USA* **106**, 14518–14523 (2009).

## MINERAL METABOLISM

Dietary supplementation with glycyrrhethinic acid (GA) may reduce hyperkalemia in patients on hemodialysis, according to a new study. In the prospective, double-blind, placebo-controlled, crossover study, 10 patients were given cookies or bread supplemented with GA or placebo. While on GA, patients had significantly lower levels of predialysis serum potassium than they did at baseline or on placebo. The frequency of severe hyperkalemia also decreased from 9% to 0.6% while on GA.

**Original article** Farese, S. *et al.* Glycyrrhethinic acid food supplementation lowers serum potassium concentration in chronic hemodialysis patients. *Kidney Int.* doi:10.1038/ki.2009.269

## DIABETIC NEPHROPATHY

Inhibition of transglutaminase prevents the progression of experimental diabetic nephropathy and may be an avenue for the treatment of patients with this disease. Administration of a transglutaminase inhibitor to uninephrectomized streptozotocin-induced diabetic rats for up to 8 months attenuated their increased serum creatinine and albuminuria. Glomerulosclerosis and tubulointerstitial scarring were also reduced.

**Original article** Huang, L. *et al.* Transglutaminase inhibition ameliorates experimental diabetic nephropathy. *Kidney Int.* **76**, 383–394 (2009).