Nature Reviews Nephrology **10**, 612 (2014); published online 7 October 2014; doi:10.1038/nrneph.2014.186; doi:10.1038/nrneph.2014.187; doi:10.1038/nrneph.2014.188; doi:10.1038/nrneph.2014.189

# **IN BRIEF**

## **RENAL ARTERY STENOSIS**

### Routine renal revascularization after stenosis: no benefit

An update of a previous meta-analysis, in light of the Cardiovascular Outcomes in Renal Atherosclerotic Lesions (CORAL) trial, has revealed that routine renal revascularization following stenosis in patients with hypertension and/ or chronic kidney disease has little effect on the risk of cardiovascular or renal outcomes compared with medical therapy. This analysis of data from eight different studies, with a mean follow-up period of 34 months, confirms that routine renal revascularization has no detectable clinical benefit in patients without other complications.

Original article Bavry, A. A. et al. Renal artery revascularization: updated meta-analysis with the CORAL Trial. JAMA Intern. Med. doi:10.1001/jamainternmed.2014.4332

# **RISK FACTORS**

#### AKI after CABG increases risk of ESRD

New data from a study of 29,330 patients who received isolated coronary artery bypass grafting (CABG) surgery show that occurrence of postoperative acute kidney injury (AKI) results in an almost threefold increase in risk of end-stage renal disease (ESRD), after a mean follow-up of  $4.3\pm2.4$  years. Patients who had more-severe postoperative AKI (AKIN stages 2 and 3 versus AKIN stage 1) had a greater risk of developing ESRD later in life.

Original article Rydén, L. *et al.* Acute kidney injury after coronary artery bypass grafting and long-term risk of end-stage renal disease. *Circulation* doi:10.1161/CIRCULATIONAHA.114.010622

# TRANSPLANTATION

#### Steroid-free immunosuppression reduces 5-year morbidity

A randomized, prospective study has compared the effects of corticosteroid use ( $\geq$ 6 months) versus no corticosteroid use, both in combination with standard immunosuppression in renal transplant recipients. A reduction in morbidity in the steroid-free group was detected after 5 years. Renal function at 5 years was stable and similar between groups. No significant differences in graft rejection or survival were detected between groups after 1 year or 5 years, suggesting that immunosuppression without long-term corticosteroid use has similar efficacy and fewer adverse events.

Original article Cantarovich, D. et al. Early corticosteroid avoidance in kidney transplant recipients receiving ATG-F induction: 5-year actual results of a prospective and randomized study. Am. J. Transplant. doi:10.1111/ajt.12866

## **RENAL FIBROSIS**

#### Renal interstitial fibrosis predicted by mathematical model

New research shows that the progression of renal fibrosis, as observed in patients with lupus nephritis, can be accurately simulated using mathematical modelling. The model was used to accurately predict the urinary concentrations of the putative biomarkers monocyte chemotactic protein-1 and transforming growth factor  $\beta$  in a subset of 47 patients with renal fibrosis of varying severity. Mathematical modelling could prove to be a cost-effective method for the identification of drug targets and novel candidate treatments for renal fibrosis.

Original article Hao, W. et al. Mathematical model of renal interstitial fibrosis. Proc. Natl Acad. Sci. USA doi:10.1073/pnas.1413970111