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IN BRIEF

ACUTE KIDNEY INJURY

Atorvastatin does not reduce the risk of AKI after cardiac surgery

A recent trial does not support the use of high-dose atorvastatin for prevention of acute kidney injury (AKI) after cardiac surgery. Among 199 patients who were naive to statin therapy, AKI occurred in 21.6% of those who received atorvastatin compared with 13.4% of those who received placebo. Among 416 patients who were already taking a statin, AKI occurred in 20.4% of those in the atorvastatin group and 22.4% of those in the placebo group. The monitoring board initially recommended stopping enrolment of patients naive to statin therapy because of an increased incidence of AKI among those with chronic kidney disease, and later recommended termination of the trial for futility.

ORIGINAL ARTICLE Billings, F. T. *et al.* High-dose perioperative atorvastatin and acute kidney injury following cardiac surgery. *JAMA* http://dx.doi.org/10.1001/jama.2016.0548

TRANSPLANTATION

Renal function after kidney donation

New data suggest that severe reductions in estimated glomerular filtration rate (eGFR) and the development of end-stage renal disease (ESRD) after kidney donation are not common among white donors. After a mean follow-up of 16.6 years, 215 of 3,956 donors (6.1%) had proteinuria and 112 donors (2.8%) had either an eGFR <30 ml/min/1.73 m^2 or ESRD. Individuals who developed postdonation diabetes and hypertension had a fourfold higher risk of proteinuria and a greater than twofold higher risk of ESRD than those who did not develop these comorbidities.

ORIGINAL ARTICLE Ibrahim, H. N. *et al.* Renal function profile in white kidney donors: the first four decades. *J. Am. Soc. Nephrol.* http://dx.doi.org/10.1681/ASN.2015091018

POLYCYSTIC KIDNEY DISEASE

Sirolimus is ineffective in ADPKD

Researchers report that sirolimus is "unsafe and ineffective" in patients with autosomal dominant polycystic kidney disease (ADPKD) and renal insufficiency. Ruggenenti *et al.* compared the efficacy of sirolimus plus conventional therapy versus conventional therapy alone in 41 patients with ADPKD and chronic kidney disease stage 3b or 4. At 1 year follow-up, total kidney volume had increased by 9.0% in the sirolimus group compared with 4.3% in the control group; glomerular filtration rate decreased significantly in both groups. Moreover, albuminuria and proteinuria increased significantly and two patients developed end-stage renal disease in the sirolimus group. Early termination of the trial was recommended for safety reasons.

ORIGINAL ARTICLE Ruggenenti, P. *et al.* Effect of sirolimus on disease progression in patients with autosomal dominant polycystic kidney disease and CKD stages 3b–4. *Clin. J. Am. Soc. Nephrol.* http://dx.doi.org/10.2215/CJN.09900915

ACUTE KIDNEY INJURY

Postoperative FGF-23 levels are associated with AKI

Levels of FGF-23 increase early in the course of acute kidney injury (AKI) following cardiac surgery and are independently associated with severe AKI and adverse outcomes, say researchers. Among 250 patients undergoing cardiac surgery, those who developed AKI had significantly higher levels of plasma c-terminal FGF-23 at the end of cardiopulmonary bypass and on postoperative days 1 and 3. In those who developed severe AKI, the levels of intact FGF-23 also increased after surgery.

ORIGINAL ARTICLE Leaf, D. E. *et al.* Fibroblast growth factor 23 levels are elevated and associated with severe acute kidney injury and death following cardiac surgery. *Kidney Int.* http://dx.doi.org/10.1016/j.kint.2015.12.035