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IN BRIEF

EPIDEMIOLOGY

Genetic association between renal function and stroke

Using polygenic models constructed from genome-wide association study data, researchers have shown that polygenic scores that correlate with high estimated glomerular filtration rate are associated with a reduced risk of large artery atherosclerosis. They suggest that the association between renal disease and stroke might be due to shared genetic factors, which may differ depending on the ischaemic stroke subtype.

Original article Holliday, E. G. *et al.* Polygenic overlap between kidney function and large artery atherosclerotic stroke. *Stroke* doi:10.1161/STROKEAHA.114.006609

TRANSPLANTATION

Disproportionate stunting in children with ESRD

Children with end-stage renal disease (ESRD) exhibit marked disproportionate stunting, according to a new study. A low average body height, but high average sitting height index during early childhood was identified in a cohort of 389 paediatric renal transplant recipients, as compared with reference data. From preschool to adult age, patients underwent a sustained increase in standardized leg length and a decrease in standardized sitting height. Restoration of body proportions was observed in the majority of patients by adulthood.

Original article Franke, D. *et al.* Patterns of growth after kidney transplantation among children with ESRD. *Clin. J. Am. Soc. Nephrol.* doi:10.2215/CJN.02180314

MINERAL METABOLISM

Proteinuria increases phosphate retention

A pathophysiologic link exists between proteinuria and renal phosphate handling, say researchers. An analysis of 1,738 patients with chronic kidney disease identified albuminuria ≥ 300 mg per 24 h as an independent predictor of high phosphate levels. Using both rat and mouse animal models, the researchers showed that proteinuria-induced phosphate retention was partly caused by enhanced sodium-dependent phosphate transport protein 2A expression and decreased fibroblast growth factor (FGF)-23 activity. They suggest that high levels of phosphate and FGF-23 in patients with proteinuria might contribute to their increased risk of cardiovascular disease.

Original article de Seigneux, S. *et al.* Proteinuria increases plasma phosphate by altering its tubular handling. *J. Am. Soc. Nephrol.* doi:10.1681/ASN.2014010104

RISK FACTORS

Co-trimoxazole associated with increased mortality

New research suggests that administration of co-trimoxazole in patients aged ≥ 66 years receiving angiotensin-converting-enzyme inhibitors or angiotensin-receptor blockers is associated with an increased risk of sudden death compared with administration of amoxicillin. In this case-controlled study, approximately three deaths within 14 days occurred per 1,000 prescriptions of co-trimoxazole. The researchers propose that this effect might be due to undiagnosed hyperkalaemia, and alternative antibiotics that do not contain trimethoprim should be considered for these patients.

Original article Fralick, M. *et al.* Co-trimoxazole and sudden death in patients receiving inhibitors of renin-angiotensin system: population based study. *BMJ* doi:10.1136/bmj.g6196