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## IN BRIEF

#### THROMBOTIC MICROANGIOPATHY

# Effect of combined complement gene mutations on aHUS clinical phenotype

The presence of more than one mutation in the genes that encode different components of the complement cascade influences the clinical phenotype of atypical haemolytic uraemic syndrome (aHUS), say researchers. Bresin *et al.* identified combined mutations in 3% of 795 patients with aHUS. The combined presence of mutations in *CFH* and *MCP* significantly increased disease penetrance compared with the effect of one risk haplotype. Kidney transplant outcomes were also worse for patients with a combined *MCP* mutation than for those with an isolated *MCP* mutation.

Original article Bresin, E. et al. Combined complement gene mutations in atypical hemolytic uremic syndrome influence clinical phenotype. J. Am. Soc. Nephrol. doi:10.1681/ASN.2012090884

#### **RENAL ARTERY STENOSIS**

#### CD40 and renal dysfunction in renal artery stenosis

The CD40–soluble CD40 ligand signalling cascade may have a role in the development and progression of renal injury in patients with atherosclerotic renal artery stenosis, conclude the researchers of a new study. In a single-centre cohort of 60 patients with renal artery stenosis, Haller and colleagues found low baseline levels of circulating CD40 and baseline creatinine level to be associated with loss of kidney function at 1-year follow-up.

Original article Haller, S. T. et al. Effect of CD40 and sCD40L on renal function and survival in patients with renal artery stenosis. *Hypertension* doi:10.1161/HYPERTENSIONAHA.111.00685

### **TRANSPLANTATION**

# Reversal of microvascular damage in patients with type 1 diabetes after pancreas-kidney transplantation

A new study reports that simultaneous pancreas–kidney transplantation effectively reverses the microvascular structural abnormalities of patients with diabetic nephropathy within 1 year of transplantation. Using sidestream dark field imaging, Khairoun et al. found that capillary tortuosity was increased in transplant naive patients with type 1 diabetic nephropathy but reversed by simultaneous pancreas–kidney transplantation. By contrast, capillary tortuosity in kidney transplant recipients was not different to that of untransplanted patients. The ratio of circulating angiopoietin-2 to angiopoietin-1 was also decreased after simultaneous organ transplantation.

**Original article** Khairoun, M. *et al.* Microvascular damage in type 1 diabetic patients is reversed in the first year after simultaneous pancreas-kidney transplantation. *Am. J. Transplant.* DOI:10.1111/ajt.12182

#### POLYCYSTIC KIDNEY DISEASE

### PKD1 mutation type affects outcome in ADPKD

A study of 741 patients with autosomal dominant polycystic kidney disease (ADPKD) has found that the type of mutation in *PKD1*, but not its position, correlates with renal survival. Median age at onset of end-stage renal disease for carriers of a truncating mutation was 55 years versus 67 years for carriers of a nontruncating mutation.

**Original article** Cornec-Le Gall, E. et al. Type of PKD1 mutation influences renal outcome in ADPKD. J. Am. Soc. Nephrol. doi:10.1681/ASN.2012070650