

improvement following transplantation, but the other tests assessing these functions, and tests assessing psychomotor function, showed no change. When patients' performances on the battery of tests were compared with those of a normative sample, memory impairments were detected in 11 dialysis patients at baseline, but in only 4 patients after transplantation. This finding seems to indicate that memory impairment occurring during dialysis can reverse following transplantation.

Original article Griva K *et al.* (2006) Cognitive functioning pre- to post-kidney transplantation—a prospective study. *Nephrol Dial Transplant* 21: 3275–3282

Three updated *Cochrane* Reviews evaluate treatment options in chronic kidney disease

A trio of new systematic analyses of data on calcimimetics for secondary hyperparathyroidism, management of progression of diabetic kidney disease, and different dialysis modalities, highlight the need for more large, high-quality trials in these areas.

The *Cochrane* Renal Group evaluated the use of calcimimetics for hyperparathyroidism secondary to chronic kidney disease. The researchers identified eight eligible randomized controlled trials including 1,429 patients. Compared with placebo plus standard therapy, treatment with calcimimetics plus standard therapy (e.g. calcitriol, vitamin D analogs, or oral phosphate binders) considerably lowered levels of biochemical factors associated with increased mortality, cardiovascular risk and osteitis fibrosa (parathyroid hormone, serum calcium, serum phosphorus and calcium \times phosphorus product). Adverse effects were generally transient, and of mild to moderate severity. As hypotension was the only patient-based end point that improved following administration of calcimimetics, however, the clinical benefit of these agents—approved by the FDA in 2004—in secondary hyperparathyroidism remains uncertain.

A second review by Strippoli *et al.* addressed the use of angiotensin-converting-enzyme (ACE) inhibitors and angiotensin II receptor blockers for the prevention of diabetic kidney disease progression. Randomized controlled trials of at least 6 months duration (50 studies, 13,215 patients) were analyzed. Compared with placebo, neither ACE inhibitors nor angiotensin II receptor blockers significantly reduced the risk of all-cause mortality. Subgroup analyses, however, showed that maximum-tolerated doses—as opposed to lower 'renal doses'—of ACE inhibitors reduced the risk of all-cause death compared with placebo. ACE inhibitors and angiotensin II receptor blockers had similar toxicity profiles and similarly beneficial effects on renal outcomes (e.g. reducing the risk of progression to end-stage renal disease and promoting normoalbuminuria), but a dearth of head-to-head comparisons of these drugs precluded assignment of superiority.

Finally, Rabindranath *et al.* compared the safety and efficacy of convective extracorporeal renal replacement therapies (hemofiltration, hemodiafiltration and acetate-free biofiltration) with hemodialysis in end-stage renal disease. It had been suggested that convective extracorporeal methods might be more effective than hemodialysis and associated with fewer adverse symptoms, but combined analysis of 20 randomized controlled trials (657 patients) showed no advantage of these dialysis modalities over hemodialysis in terms of mortality, hospitalization or dialysis-related hypotension. Sample sizes, however, were small.

Original articles Strippoli GFM *et al.* (2006) Calcimimetics for secondary hyperparathyroidism in chronic kidney disease patients. *The Cochrane Database of Systematic Reviews*, Issue 4, Art. No CD006254

Strippoli GFM *et al.* (2006) Angiotensin converting enzyme inhibitors and angiotensin II receptor antagonists for preventing the progression of diabetic kidney disease. *The Cochrane Database of Systematic Reviews*, Issue 4, Art. No CD006257

Rabindranath KS *et al.* (2006) Haemodiafiltration, haemofiltration and haemodialysis for end-stage kidney disease. *The Cochrane Database of Systematic Reviews*, Issue 4, Art. No CD006258