PHOSPHATE BINDERS 'EFFECTIVE' IN PD

A recent study has demonstrated that phosphate binders are safe and effective for controlling phosphorus levels in patients on peritoneal dialysis (PD).

"Phosphate control strategies should be similar for all patients with chronic kidney disease, irrespective of dialysis modality," says lead author Pieter Evenepoel.

High serum phosphorus levels are associated with increased morbidity and mortality in patients with stage 5 chronic kidney disease who are on dialysis. The efficacy of phosphate binders for controlling phosphorus levels is well known in patients receiving hemodialysis, but no large, randomized, controlled study has investigated the use of these agents in patients on PD until now. Cross-sectional data indicate that patients on PD might have an even higher phosphate burden than those on hemodialysis.

The open-label, parallel-group study randomly assigned 143 patients on PD with phosphorus levels >1.8 mmol/l (after a 2-week phosphate binder washout period) to sevelamer hydrochloride ($n=97$) or calcium acetate ($n=46$) for 12 weeks. The investigators titrated the doses of each agent to achieve a serum phosphorus level between 1.0 mmol/l and 1.8 mmol/l. Both phosphate binders resulted in a decrease in serum phosphorus level after 12 weeks, and sevelamer was noninferior to calcium acetate in this regard. Serum calcium levels increased in the calcium acetate group. Lipid profiles improved in patients who received sevelamer but not in those who received calcium acetate. Both treatments were generally well tolerated with similar percentages of treatment-related adverse events in each group.

Sevelamer is associated with reduced progression of cardiovascular calcification compared with calcium-based phosphate binders. "This study provides data to show that sevelamer is as effective and safe in patients on PD as in those on hemodialysis", says Evenepoel.

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Original article Evenepoel, P. *et al.* Efficacy and safety of sevelamer hydrochloride and calcium acetate in patients on peritoneal dialysis. *Nephrol. Dial. Transplant.* **24**, 278–285 (2009).