

## **RAPID AND SUSTAINED REDUCTION OF PHOSPHOROUS LEVELS WITH LANTHANUM CARBONATE TREATMENT IN PHOSPHOROUS BINDER-NAIVE PATIENTS**

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The goal of this retrospective database analysis was to determine the efficacy of the non-calcium, non-resin phosphorous (P) binder lanthanum carbonate (LC) (Fosrenol®, Shire) in controlling serum P levels of patients on dialysis previously untreated with P binders.

Patients with elevated serum P levels undergoing dialysis received education on P control and were treated with LC 500 mg TID (n=16) and maintained at that level (n=9) or titrated to LC 1000 mg TID, as needed. Serum P levels were measured monthly. Patients began treatment for ~1 year (mean [SD]: 12.00 [7.29] mo; range 2–26 mo) after (n=11), or before (n=5), starting dialysis.

The mean (SD) serum P level in patients (n=11) before initiation of P binder treatment (6.52 [0.70] mg/dL) dropped significantly to 4.81 (1.20; P<0.001) mg/dL 1 month after start of LC 500 mg TID. For patients whose dosage was elevated to LC 1000 mg TID (n=6), the serum P level before dosage increase (6.93 [0.25] mg/dL) dropped significantly to 4.47 (0.95; P<0.001) mg/dL 1 month after dosage increase.

Initiation of LC treatment permitted our clinic to maintain at least 65% of the patients within the KDOQI guideline of  $\leq 5.5$  mg/dL. Of the 11 patients who began treatment with LC after the start of dialysis, 9 (82%) reached this level within 1 month and maintained control after 6 months. All 5 patients who began treatment with LC before dialysis met the guideline 1 month after starting dialysis and 4 (80%) maintained control after 6 months. Overall, treatment with LC was effective in bringing serum P levels within KDOQI guidelines rapidly and maintaining those levels in 13 of 16 patients (81.3%). Patient nutritional status was maintained throughout treatment (mean serum albumin levels [SD] 3.61 [0.28] g/dL over 13.81 [8.4] mo).

Treatment with LC in conjunction with patient education was shown to be effective in maintaining serum P levels in patients previously untreated with P binders before starting dialysis and as primary treatment after starting dialysis.