

ERGOCALCIFEROL AND ACTIVE VITAMIN D FOR HYPERPARATHYROIDISM IN CKD

Louisa Ho, Nadia Khambati and Stuart M. Sprague

Evanston Northwestern Healthcare, NUFSON, Evanston, IL

Vitamin D (25D) insufficiency and deficiency are an increasingly recognized problem in CKD patients. We had demonstrated that treatment with ergocalciferol (Ergo) resulted in a significant decrease of PTH in CKD stage 3 but not in stage 4.

The effect of active vitamin D therapy (VDRA) in CKD patients (pts) who had 25D deficiency corrected with Ergo was assessed in a subset of 19 CKD pts. Pts were initially treated with Ergo to correct and maintain 25D levels in sufficient range (>30 ng/mL). Pts who did not achieve goal PTH levels were begun on VDRA therapy. Follow up was 20±6 months. 61% of pts achieved 25D levels above 30 ng/ml. 22% of pts were 25D sufficient at the first measurement. 47% of pts received paricalcitol; 53% calcitriol. There was no change in the Ca, P or eGFR following treatment. Patients who were 25D sufficient (Grp2) from the start demonstrated less PTH responsiveness to Ergo than those who were insufficient (Grp1) (p<0.001). There was no difference in response found between the choice of VDRA. The addition of any VDRA significantly reduced PTH in Grp 1, with a trend for significance in Grp2.

Group 1	Period 1 (pre-tx)	Period 2 (Ergo only)	Period 3 (Ergo/activeD)
Mean 25 D	18.1 +/-5.7	30.4+/-9.1	32.9 +/-8.9
Mean PTH	241.5+/-83.4	230.0+/-73.7	159.2+/-64.6
Group 2	Grp 1 ergo	Grp 1 ergo/active	Grp 2 ergo
Mean 25 D	36.7+/-8.9	38.3+/-3.1	33.3+/-74
Mean PTH	120+/-76	259.8+/-37	128.9+/-53.6
%PTH change	+4.4 %	-30.4%	+196%
	p<0.048		p<0.089

Response to Ergo may be related to degree of 25D insufficiency. VDRA therapy decreases PTH, though mean PTH remains above recommended ranges.