

WIDE FLUCTUATION OF PTH LEVELS DESPITE UNCHANGED DOSE OF CINACALCET IN HEMODIALYSIS PATIENTS

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Purpose: The goals in treatment of secondary hyperparathyroidism are to lower levels of PTH, calcium, and phosphorus in the blood to prevent progressive bone disease and the systemic consequences of disordered mineral metabolism. Hemodialysis patients with uncontrolled secondary Hyperparathyroidism have a favorable impact on bone-specific alkaline phosphatase, bone turnover and bone fibrosis with reductions in PTH.

The calcium-sensing receptor on the surface of the chief cell of the parathyroid gland is the principal regulator of PTH secretion. Cinacalcet directly lowers PTH levels by increasing the sensitivity of the calcium-sensing receptor to extracellular calcium. Introduction of Cinacalcet and its increase use in the dialysis units allow clinical observation of its sustained effects on the PTH measurement.

Methods: We have reviewed the records of 17 stable dialysis patients who were receiving Cinacalcet over last 12 months period. Non compliant patients and those with history of hospitalization were excluded.

8/17 (47%) patients had improved PTH with unchanged or increasing doses of Cinacalcet therapy. 3/17 (17.6%) patients didn't respond to increase Cinacalcet dose. PTH fluctuated (150-800) significantly despite an unchanged dose of Cinacalcet therapy in 6/17 (35.2%) patients.

Serum calcium and phosphate levels didn't have any consistent relationship with the fluctuation of PTH levels. The patients did not receive any drugs like erythromycin or ketoconazole that could interact with Cinacalcet.

Conclusion: Wide fluctuation of PTH levels observed in one third of dialysis patients despite unchanged dose of Cinacalcet therapy.