

2차성 부갑상샘 항진증의 치료에 있어 수술적 치료에 대한 cinacalcet 치료의 유용성

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Parathyroidectomy Versus Cinacalcet Hydrochloride-based Medical Treatment in the Management of Renal Hyperparathyroidism: i-PTH and ALP

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Background: It was well known that patients with end-stage renal disease with uncontrolled hyperparathyroidism had few options other than parathyroidectomy, which was reserved for patients refractory to medical therapy. The aim of this study was to compare the clinical effectiveness of surgery with calcimimetics as treatment strategies for managing the biochemical abnormalities that characterize secondary hyperparathyroidism, resistant to optimal medical therapy in ESRD patients.

Subjects and methods: Forty patients with 2HPTH resistant to conventional medical therapy were enrolled. One cohort of 20 patients was treated with surgical parathyroidectomy, the other cohort of 20 patients with cinacalcet. Serum parathyroid hormone (PTH) and bone profile were measured before and at monthly intervals after intervention.

Results: Both cohorts were comparable in their demographic profile, pretreatment comorbidities, baseline PTH, and bone profile. In all 20 surgical patients, the 3-month postoperative PTH had decreased by 84% ($p < 0.001$); in the medical cohort after 3 months of daily cinacalcet, the PTH decreased by 32% ($p < 0.001$) from baseline. This reduction was maintained at 12 months. In all but 3 surgical patient, alkaline phosphatase (ALP) decreased to normal levels, whereas on cinacalcet, there was no statistically significant reduction. Patients who underwent parathyroidectomy had a more significant decrease in PTH ($p < 0.001$) and ALP ($p < 0.05$) than did patients on cinacalcet therapy. Dynamics BMD from baseline in the cinacalcet vs. PTx groups: L2-L4 $+0.07 \pm 0.36\%$ ($p > 0.05$) vs. $+16.83 \pm 2.9\%$ ($p < 0.01$).

Conclusion: Newer calcimimetic agents, such as cinacalcet, may be an alternative, but raise the possibility of indefinite medical treatment that also would increase costs. PTx and cinacalcet therapy was associated with significant reductions in iPTH, Ca and CaxP, but bone resorption and formation markers decreased better in the PTx group compared to cinacalcet group.

Key Words: 부갑상샘항진증, 부갑상샘절제술, 시나칼세트

Hyperparathyroidism, Parathyroidectomy, Cinacalcet