Cinacalcet In the Treatment of Primary Hyperparathyroidism

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Introduction

- Primary hyperparathyroidism is currently recognized with increasing frequency by routine calcium measurement in biochemical examinations
- Primary hyperparathyroidism may be due to a parathyroid adenoma, parathyroid hyperplasia and, rarely, parathyroid carcinoma
- Cinacalcet is used in the medical management of primary hyperparathyroidism



 The aim was to assess the role of cinacalcet in the treatment of primary hyperparathyroidism

Methods

- Patients with primary hyperparathyroidism (n=20) (aged 56-85 years) were studied
- Amongst them 4 patients had parathyroid hyperplasia and 16 had a parathyroid adenoma
- Calcium and PTH levels were increased in all patients
- All patients had ultrasonography and a 99mTc-Sestamibi scan
- In 16 patients a parathyroid adenoma was observed either on ultrasound or on scanning or in both
- In 4 of the patients a parathyroid adenoma was not localized by imaging

Results

- Cinacalcet was used in all 16 parathyroid adenoma patients to normalize serum calcium levels prior to surgery
- In 10 of the parathyroid adenoma patients the adenoma was surgically excised, in a female aged 56, hyperparathyroidism recurring a year after surgery
- Sequentially, cinacalcet was administered at a dose of 30 mg twice daily and serum calcium levels normalized
- Within the group of patients with a parathyroid adenoma 6
 were elderly, aged >75 years, with comorbidity and cinacalcet
 was administered at a dose of 30 mg twice daily in 3 and 60
 mg twice daily in 1 to avoid surgery
- In the group of patients with parathyroid hyperplasia cinacalcet was used for the treatment of hypercalcemia
- Within the whole group, 2 patients experienced mild gastrointestinal symptoms, but discontinuation of the drug could be avoided

Conclusions

- Cinacalcet may be used for the treatment of primary hyperparathyroidism
- It can be used for the normalization of serum calcium prior to surgery, if surgery is not an option, in the event of recurrence after surgery and in parathyroid hyperplasia