

# Persistent hypercalcemia in kidney transplant recipients treated with cinacalcet

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## OBJECTIVES

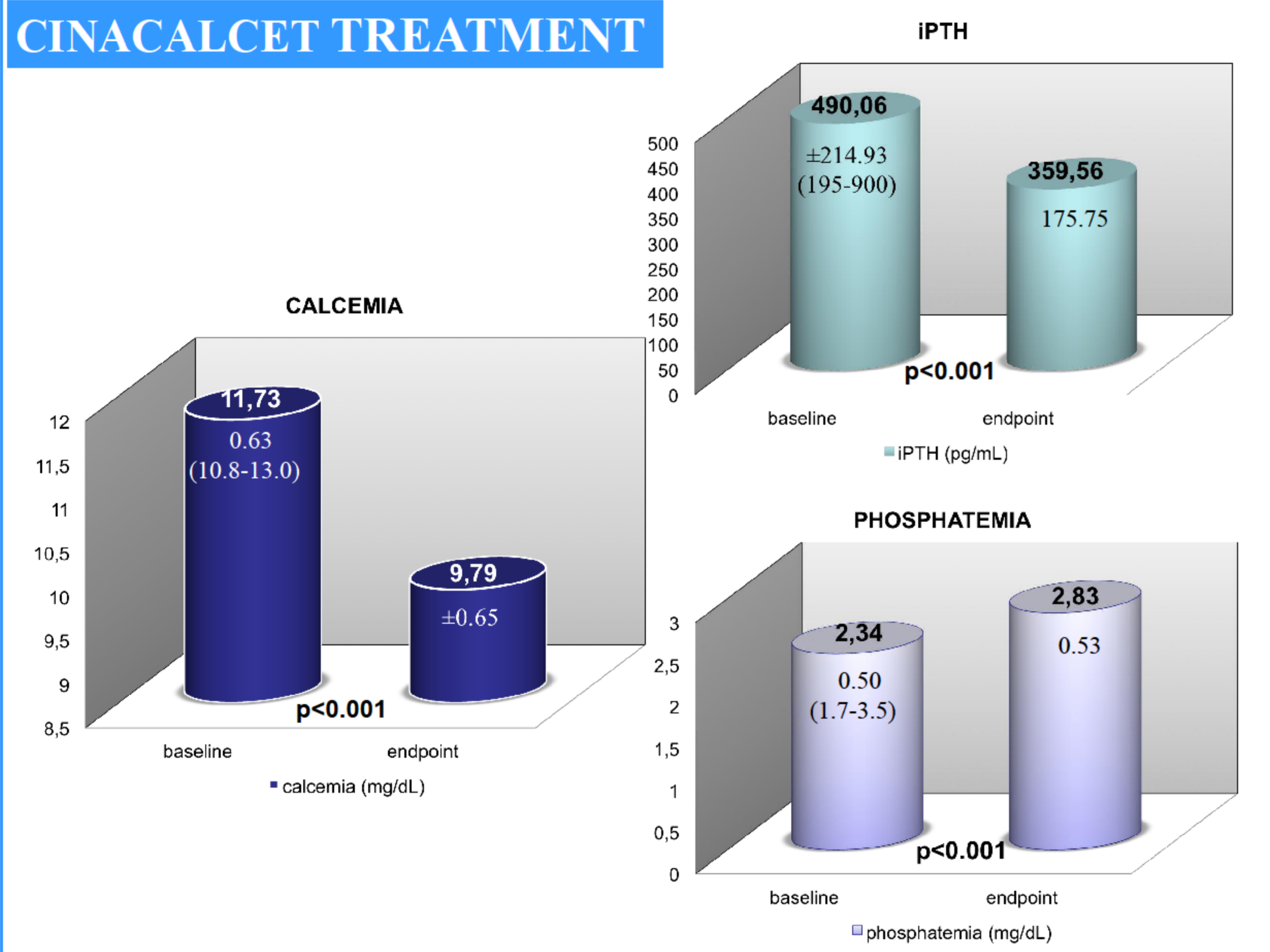
Hypercalcemia caused by persistent hyperparathyroidism after a successful kidney transplant (KT) is a common problem and may negatively affect graft function, bone metabolism and the cardiovascular system. Cinacalcet has been approved for treating secondary hyperparathyroidism in hemodialysis patients but there are no clear and acceptable treatment guidelines for hypercalcemia in kidney transplant patients.

**The aim of the study was to evaluate the effect of cinacalcet on persistent hypercalcemia due to hyperparathyroidism in renal transplant recipients.**

## METHODS

- In the retrospective observational study we analysed 18 patients (men n=9/women n=9; 1st KT n=11/ 2nd KT n=7) with persistent hypercalcemia > 10.8 mg/dL and intact parathyroid hormone (iPTH) concentration > 195 pg/dL.
- All patients in the study were started on cinacalcet at different points after the kidney transplant. The median time after transplantation was 24 months (interquartile range, IQR 12-57) (mean time 41.4 ± 35.8; range 5-120).
- The initial dose of 30 mg per day was progressively adapted according to serum calcium levels to maximum 90 mg per day (in two patients). In one patient it was reduced to 15 mg/day and in five patients raised to 60 mg/day.

## CINACALCET TREATMENT



## RESULTS

- During the observation time the graft function in all patients was stable, median serum creatinine concentration was 1.3 mg/dL (interquartile range, IQR 1.1-1.4) and eGFR MDRD 54 ml/min/1.73m<sup>2</sup> (IQR 40.1-62.9).
- The median observation time was 17 months (IQR 3-20) (mean time 17 ± 24.3; range 2-88).
- Gastrointestinal side effects including nausea and vomiting were observed in one patient.
- There was no significant difference between patients after the first and the second kidney transplant.

## CONCLUSIONS

**Cinacalcet administered after a kidney transplant seems to be an effective and well-tolerated treatment for the management of persistent hypercalcemia due to hyperparathyroidism and may be considered as a therapeutic alternative to surgical parathyroidectomy. However, the cost of cinacalcet should be taken into consideration before a prolonged treatment is initiated.**

## REFERENCES:

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