

CINACALCET IN A ONE CENTER PERITONEAL DIALYSIS PATIENTS: WHAT COULD WE EXPECT?

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INTRODUCTION

Mineral Bone Disease (MBD) has been largely studied in patients with **Chronic Kidney Disease (CKD)**. The secondary hyperparathyroidism (SHPT) is the target of several therapeutic strategies, including the use of **cinacalcet**, which has improved the CKD-MBD outcomes. However, most studies included only hemodialysis patients, with few data from **Peritoneal Dialysis (PD)** patients.

METHODS

- Prospective study performed at a single PD Unity in Portugal (Peritoneal Dialysis Unity, Hospital de Santa Cruz, Carnaxide)
- Study of a cohort of 27 patients with moderate to severe SHPT (**PTHi > 500 pg/mL**) who were treated with cinacalcet
- Cinacalcet was started due to:
 - Lack of response with conventional treatment: diet, maximum tolerated doses of phosphate binders and vitamin D or
 - Inability to treat with vitamin D due to hyperfosfatemia (>5,5 mg/dL) or hypercalcemia (>10,5 mg/dL)
- We analyzed demographic, clinical and laboratory parameters at the **beginning of cinacalcet therapy, second, fourth, sixth months** after and at the **time** it was **finished**. In patients who were still under cinacalcet therapy, we studied the last laboratorial available results. The duration of cinacalcet therapy, maximum tolerated doses, effectiveness and safety, including the adverse effects, were also studied. Measurements of calcium were corrected for serum albumin.

RESULTS

Demographic, clinical and laboratory characteristics of patients under cinacalcet therapy (Table 1)

	Cinacalcet therapy (n=27)
Age (years)	46,28±15,65
Gender - male(n/%)	15 (55,6%)
Diabetes (n/%)	6 (22,2%)
BMI (Kg/m ²)	26,36±5,17
Time under PD (months)	30,99±16,58
Time under Cinacalcet (months)	15,62±13,37
Cinacalcet doses (mg/day)	45 (15-90)
Adverse GI effects (n/%)	21 (77,8%)
Patients treated with vitamin D analogs/phosphorus binders (n/%)	25 (92,6%)

BMI: Body Mass Index; PD: Peritoneal Dialysis; GI: Gastrointestinal

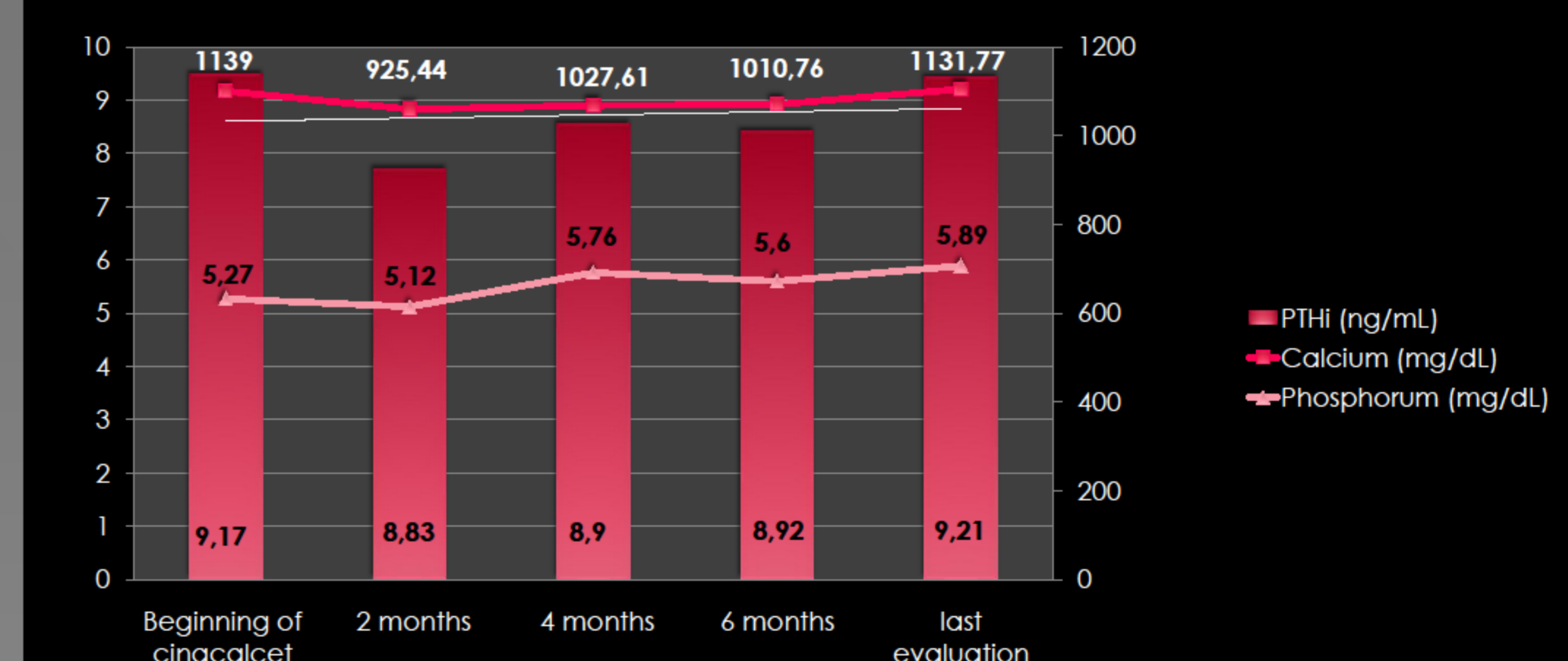
DP solutions (Table 2)

	Cinacalcet therapy (n=27)
Calcium 1,25 (%)	63
Calcium 1,75 (%)	37

DP drop-out (Table 3)

	TX cinacalcet (n=27)
Hemodialysis	3
Kidney Transplantation	1

Laboratorial values under Cinacalcet therapy



CONCLUSION

- Difficulty in assessing and monitoring adherence.
- Safe drug in patients on PD with moderate to severe SHPT.
- Adverse gastrointestinal effects made impossible the prescription of higher doses of cinacalcet.
- Eventual benefit of this drug at higher doses in SHPT was impossible to evaluate.
- It is necessary to develop new forms of cinacalcet presentation, allowing dose titration and optimization of therapeutic response.

