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Cinacalcet Use in Persistent Hyperparathyroidism in Post Renal Transplant Recipient- A retrospective observational study in Hospital Kuala Lumpur

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Introduction:

Hyperparathyroidism can persist after successful renal transplant and manifests as hypercalcemia and hypophosphatemia. Persistent hyperparathyroidism is associated with renal allograft loss, bone diseases, cardiovascular calcifications and mortality. Medical therapy using cinacalcet in moderate hypercalcemia can reduce parathyroid level and ultimately calcium level.

Objective:

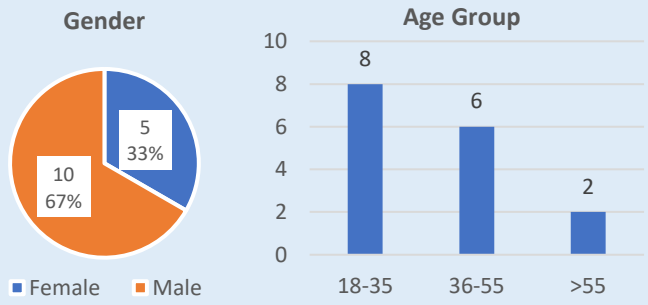
To analyse the effect of cinacalcet on post transplant recipient with persistent hyperparathyroidism and correlate with renal allograft function.

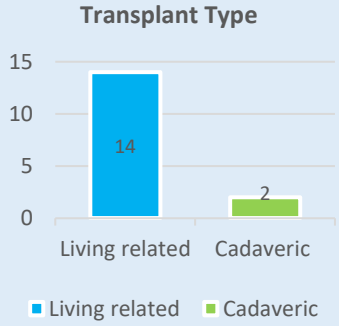
Methodology

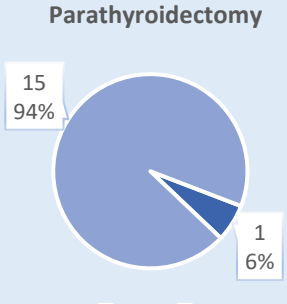
This is a retrospective observational study in Nephrology Department Hospital Kuala Lumpur targeting post renal transplant recipients who had cinacalcet started from year 2018-2021. Patients with hyperparathyroidism, hypercalcemia with cinacalcet prescribed were included. The trend of intact parathyroid hormone(iPTH), total calcium, phosphate, alkaline phosphatase (ALP) and creatinine trend were being observed and analysed from pre-cinacalcet initiation, 6 months and 12-months post initiation.

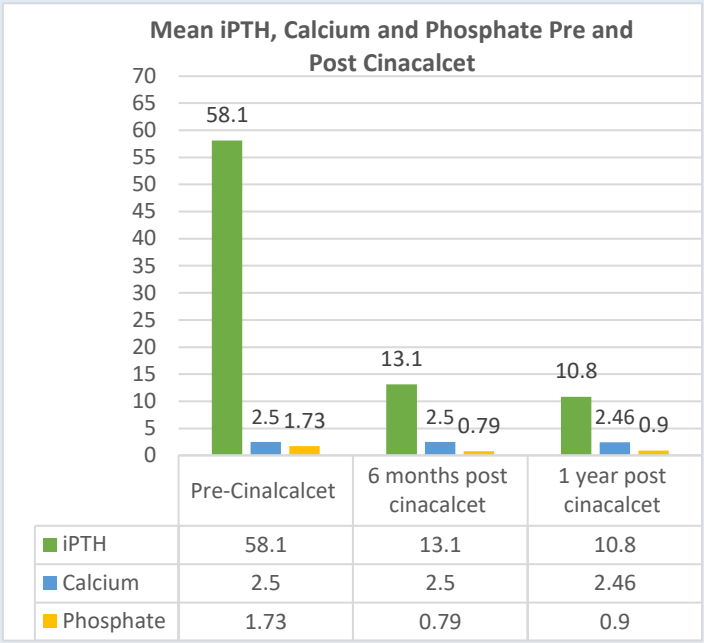
Results:

A total of 16 patients fulfilled the inclusion criteria with mean age= 39.3 and mean dialysis vintage of 6 years.

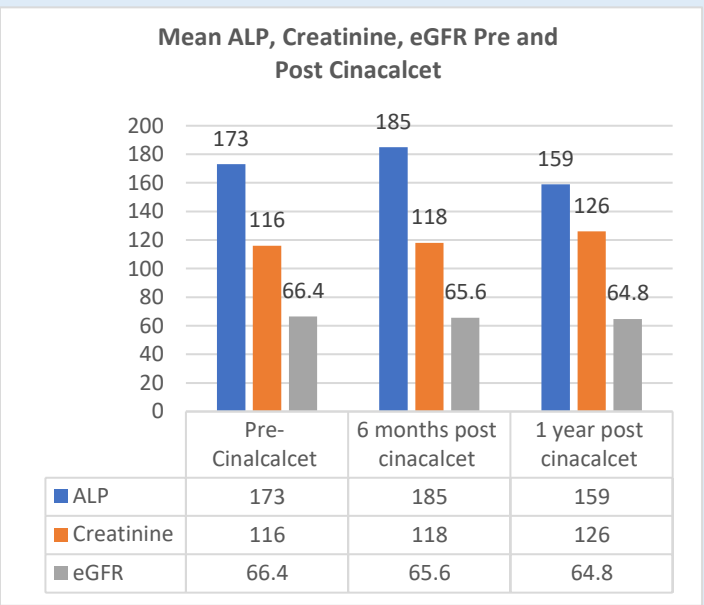








	Pre-Cinalcalcet	6 months post cinacalcet	1 year post cinacalcet
iPTH	58.1	13.1	10.8
Calcium	2.5	2.5	2.46
Phosphate	1.73	0.79	0.9



	Pre-Cinalcalcet	6 months post cinacalcet	1 year post cinacalcet
ALP	173	185	159
Creatinine	116	118	126
eGFR	66.4	65.6	64.8

Conclusion:

In this study, it is observed that cinacalcet significantly reduced iPTH and phosphate by 6-month although the total calcium level did not differ much. The mean creatinine and eGFR which were stable suggest that hyperparathyroidism control plays a role in maintaining long term renal allograft survival.

References:

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