

Cinacalcet Treatment in an Adolescent With Hypocalciuric Hypercalcemia

Bülent Hacıhamdioğlu¹, Kenan Delil², Ozan Özkaya³

¹ Health Sciences University Suleymaniye Women Maternity and Child Diseases Training and Research Hospital, Istanbul, Turkey

² Department of Medical Genetics, Marmara University, School of Medicine, Istanbul, Turkey

³ Health Sciences University Okmeydanı Training and Research Hospital, Istanbul, Turkey

Introduction

- 👉 Familial hypocalciuric hypercalcemia (FHH) is a genetically heterogeneous condition resembling primary hyperparathyroidism but not curable by surgery.
- 👉 Cinacalcet may improve symptoms some patients but limited experienced especially in children.

Case

- 👉 A 10 years old child evaluated by uveitis, sacroileitis, spondyloarthritis and diagnosed as HLA-B27 positive juvenile idiopathic arthritis (JIA).
- 👉 Also at the same time he evaluated by high calcium, low phosphate and inappropriately high PTH level and hypocalciuria. Therefore he diagnosed as hypocalciuric hypercalcemia.
- 👉 He screened for calcium sensing receptor (CASR) mutations with negative results. Further genetic analyses will plan for other reason of FHH. His JIA and associated symptoms resolved after anti-inflammatory therapy, but his hypercalcemia and associated symptoms persisted; also osteoporosis was detected on dual-energy X-ray absorptiometry.
- 👉 As a result of symptomatic hypercalcemia, the patient was treated with a calcimimetic (cinacalcet). During the treatment, plasma calcium and PTH level decreased.

	Before treatment	1 month of treatment	3 month of treatment
Calcium (mg/dl)	11.7	9.8	10.6
Phosphorus (mg/dl)	3.9	4.4	4.1
PTH (pg/ml) (10-68)	189.8	116	110

Conclusion

- 👉 Cinacalcet treatment was well tolerated without significant side effects.
- 👉 Cinacalcet therapy may be useful option for control hypercalcemia and related symptoms at least short term in children.

