Abstract Type : Poster exhibition
Abstract Submission No.: A-0749
Abstract Topic : Non-dialysis CKD

Inadequate Treatment and Monitoring in Chronic Kidney Disease-Mineral Bone Disorder Patient : A Case Report

Nanik Tri Wulandari, Rudi Supriyadi
Department of Internal Medicine-Nephrology, Padjadjaran University/ Hasan Sadikin General Hospital, Indonesia

Case Study : Chronic Kidney Disease - Mineral Bone Disease (CKD-MBD) is a serious complication in patients with chronic kidney disease, marked by disturbances in the metabolism of calcium, phosphate, parathyroid hormone (PTH), and vitamin D, as well as changes in bone turnover and quality. We present a case of a 59-year-old woman who had been undergoing thrice-weekly hemodialysis for seven years. She was referred to our hospital due to noticeable changes in her body shape for further investigation. The patient was using calcium carbonate as a phosphate binder but had not been tested for crucial CKD-MBD parameters, such as phosphorus, PTH, and vitamin D, due to limited insurance coverage. Clinical assessment revealed a gradual decrease in her height, with physical examination indicating pigeon chest and thoracic kyphoscoliosis without history of previous trauma. Laboratory tests showed significantly elevated PTH levels (254 pg/ml) alongside low vitamin D levels (16 ng/ml), but normal serum inorganic phosphate (3.5 mg/dl) and calcium levels (4.79 mg/dl). Imaging studies confirmed scoliosis of the thoracic vertebrae. The underlying mechanism in CKD-MBD typically involves hyperphosphatemia triggering PTH release, leading to secondary hyperparathyroidism due to hypocalcemia and insufficient calcitriol production. In this case, the patient's elevated PTH, along with low vitamin D and normal calcium and phosphate levels, suggests the impact of her routine calcium supplementation. The delay in adequate monitoring and therapy resulted in CKD-MBD complications. According to KDIGO guidelines, monitoring of serum levels of calcium, phosphate, PTH, and alkaline phosphatase should commence by CKD G3a. The patient is now receiving calcitriol, and our treatment strategy includes pharmacotherapy, a low phosphate diet, and adequate hemodialysis. This case underscores the need for expanded health insurance coverage to mitigate CKD-MBD risks

XRay.jpg

THE KOREAN SOCIETY OF NEPHROLOGY
KSN SEOUL, KOREA 2025
June 19 (Thu) – 22 (Sun), 2025 Coex, Seoul, Korea
Beyond Challenges, Towards Healthier Kidney