Update in CKD-MBD Guidelines

Kraiwporn Kiattisunthorn

Division of Nephrology, Department of Medicine, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok 10700, Thailand

Chronic Kidney Disease-Mineral and Bone Disorders (CKD-MBD) is a common CKD complication defined as a systemic disorder involving in bone mineral biochemical and skeletal architectures as well as extraskeletal, particularly vascular, calcification. These abnormalities result in long-term patient outcomes, including fractures and cardiovascular events. Phosphate toxicity, accompanied with skeletal resistance to parathyroid hormone (PTH) action, plays the key role in pathogenesis of the disorders frequently occurred at the early stage of CKD. Excessive calcium, led from calcium containing pills and vitamin D prescribed for controlling secondary hyperparathyroidism, also aggravates the burden in vascular calcification. After the first KDIGO clinical practice guideline for CKD-MBD management in 2009, a plenty of publications continuously provide novel knowledge and some different points of views for the intervention of fibroblast growth factor-23 (FGF-23) and management of CKD-MBD. In the early 2017, the new recommendation was announced for guiding physicians to improve quality in their practices. The major updated points include 1) How to achieve the optimal phosphate control under avoidance of excessive calcium loaded, 2) Appropriate options for controlling secondary hyperparathyroidism, and 3) Evaluation of bone strength. The sessions will summarize the significant information necessary for internists who usually take majority roles in care processes of non-dialysis, mild to moderate stage, CKD patients.

Keywords: CKD, CKD-MBD, Phosphate, Calcification, Secondary hyperparathyroidism