Management of osteoporosis in ESRD patients

Jung Soo Lim
Yonsei University Wonju College of Medicine, Korea, Republic of

Due to the increase in aging population, the prevalence of osteoporosis and chronic kidney disease (CKD) is increasing on a global scale. Osteoporosis is defined as a skeletal disorder characterized by compromised bone strength predisposing to an increased risk of fracture. In patients with stage 3–4 CKD, the risk of fracture has been reported to be twice as high as in age-matched general population; those with dialysis showed the prevalence of fragility fractures with the rate of 10–40%. Currently, there are two main types of medication used to treat osteoporosis: anti-resorptive and anabolic agents. However, although therapeutic options for osteoporosis have expanded, the optimal therapy of osteoporosis in patients with CKD or end-stage renal disease remains a challenge. It is difficult to differentiate low bone mineral density (BMD) or fractures in subjects with CKD from those with CKD-mineral and bone disorder (MBD). In addition, there is a wide spectrum of disordered bone turnover (from very low to very high) in CKD–MBD. Existing studies on the efficacy and safety of these drugs in patients with CKD are too small to provide adequate guidance for clinicians. Therefore, further research is essential to solve these unmet needs.

Today’s lecture will cover characteristics of CKD–MBD and management of osteoporosis in CKD patients, including the results of clinical trials regarding anti-osteoporosis medication.