

## Racial Differences in Secondary Hyperparathyroidism

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### Dear Editor,

I have recently read an interesting paper by Dr. Seck who had examined the prevalence of CKD-MBD in black African (Senegalese) patients on regular hemodialysis (HD) in a cross-sectional fashion (Nephrol-Urol Mon. 2012; 4(4): 613-616) (1). They showed that 57 out of the 79 patients complicated with CKD-MBD (72%) had a high turnover bone disease with a mean level of 984 pg/mL of intact parathyroid hormone (iPTH). Because mean calcium and phosphorous levels were not elevated (8.6 and 4.85 mg/dL), this marked increment of iPTH may be related to racial differences in the regulation of vitamin D-PTH axis.

Autopsy studies have demonstrated that parathyroid mass is increased in blacks compared with whites (2). There is a 4.4-fold higher risk for severe secondary hyperparathyroidism (iPTH > 500 pg/mL) in black patients than in white patients at dialysis initiation (3). African-American HD patients have iPTH levels that are higher than expected in relation to bone histology (4). Blacks with advanced CKD not yet on dialysis also have lower 25(OH) D and higher iPTH concentrations with declining kidney function compared with whites, independent of FGF-23 concentrations (5). So, there may be a unique mechanism by which blacks develop secondary hyperparathyroidism, such as skeletal resistance to PTH, or more activation of calcium-sensing receptor in the parathyroid gland.

Although current guidelines on the management of CKD-MBD recommend screening and treating abnormal-

ities in mineral metabolism, none of them take into account for racial differences. Thus, further evaluation will be needed to realize whether current guidelines are truly adequate for all races/ethnicities.

### Authors' Contribution

A.Kato made substantial contributions to conception, interpretation of data, and drafting of manuscript.

### Financial Disclosure

There was no conflict of interest.

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