HYPOVITAMINOSIS D AND ITS IMPACT ON BONE IN PRIMARY HYPERPARATHYROIDISM

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To verify the impact of hypovitaminosis D (HypoD) on bone in 21 pts with primary hyperparathyroidism (PHPT, 18F/3M, age, mean±SD, 56.0±17.2 yr, BMI 24.0±6.3 kg/m^2, iPTH=159.0±81.6 pg/ml, iCa 1.47±0.13 mmol/L), we measured 25OH vitamin D (vit. D), PTH, total and ionised calcium, phosphate, osteocalcin, bone alkalin phosphatase, albumin, cross-links and bone density by DXA. HypoD as defined by vit. D<12.0 ng/ml, was found in 12/21(57%) PHPT In PHPT with HypoD vit. D was lower (p<0.0002) while iPTH (p<0.03) and BMI (p=0.056) were higher than in remaining PHPT. Osteoporosis and osteopenia were present in 12/21 (57%) and 8/21 (38%) PHPT, respectively, without difference in vit. D levels and frequency of HypoD in these twio conditions. In a multiple regression model, among BMI, PTH and albumin, only PTH maintained a correlation with vitD (beta=-0.03, p<0.03). Our data in PHPT show that HypoD is very frequent without having negative impact on bone density; moreover, they indicate that PTH is likely the major determinant of HypoD.