Facts About Secondary Hyperparathyroidism and Vitamin D Deficiency

- 37 million adults in the United States are estimated to have chronic kidney disease (CKD) and millions of others are at increased risk.1
- As CKD gets worse, the kidneys are not able to activate vitamin D. This is an important problem because the body needs the active form of vitamin D to absorb calcium.
- Vitamin D deficiency is more common in patients with CKD than in the general population.2,3
- As kidney disease gets worse and blood vitamin D levels decrease, the body makes more and more parathyroid hormone (PTH), causing secondary hyperparathyroidism (SHPT).
- Most patients with CKD have SHPT.4
- SHPT begins as early as CKD stage 3 when eGFR (a measure of kidney function) falls below 60.5
- When SHPT is present there are low blood levels of vitamin D and calcium and high blood levels of PTH and phosphate.
- Patients with SHPT have high bone turnover which means that the cells that remove bone (osteoclasts) work faster than the cells that build new bone (osteoblasts). This leads to weak and brittle bones.
- Left untreated, SHPT can lead to bone disease, increased risk for fractures, calcium buildup in soft tissue, poor health, and even death.5
- By the time patients are ready for dialysis, most have enlarged parathyroid glands and high blood levels of PTH.6
- Parathyroid glands are found in the neck behind the thyroid glands.
- When the PTH level stays above 800 for more than 6 months, even with medical treatment, surgical removal of the parathyroid gland (parathyroidectomy) may be necessary.
- Vitamin D deficiency should be prevented or treated with vitamin D supplementation to lower the chances of having SHPT.7,8