

Successful Treatment of Recurrent Secondary Hyperparathyroidism with Forearm Autotransplanted Parathyroidectomy

Prof Yoon-Sok Chung¹, Doctor Sungdam Han¹

¹Endocrinology, Ajou University School Of Medicine, Suwon, South Korea

Secondary hyperparathyroidism is a significant disorder and is often found in patients with renal failure. Despite advances in the medical management of secondary hyperparathyroidism, patients with severe and complicated renal hyperparathyroidism, refractory or intolerant to medical therapy require parathyroidectomy. It is well known that a total parathyroidectomy and autotransplantation has good results but 1.5 ~ 10% of surgical treatments may persist or recur because of hyperfunction of the parathyroid remnant or transplanted parathyroid tissue.

A 58-year-old women presented with both hip pain for last 6 months. She was diagnosed ERSD in 1996. Subsequently, she was maintained on hemodialysis 3 times a week. In 2007, she presented both hip pain, with an increased level of calcium (10.3 mg/dL), and parathyroid hormone (2,085 pg/mL). A diagnosis of secondary hyperparathyroidism was established. In 2009, the patient had been submitted to total parathyroidectomy and parathyroid gland autotransplantation to left forearm. On this admission, diagnostic tests revealed a markedly elevated parathyroid hormone (1,110 pg/mL).

The patient's presentation and diagnostic tests resulted in recurred secondary hyperthyroidism with severe symptomatic high-turnover bone disease. Surgical removal of the autoplanted parathyroid gland (2 cm) was performed.

Histopathology revealed parathyroid hyperplasia. Postoperatively, she developed hungry bone syndrome, which was managed successfully with intravenous calcium. One week after surgery, she was discharged with oral calcium and vitamin D.