

Technical Factors Involved in Parathyroid Surgery

M. Dumitras¹, V. Strambu¹, P. A. Radu¹, C. Iorga¹, I. Bengulescu¹, F. Popa²

¹Department of General Surgery, "Carol Davila" Nephrology Clinical Hospital, Bucharest, Romania

²Department of General Surgery, "St. Pantelimon" Clinical Emergency Hospital, Bucharest, Romania

Abstract

We aimed to investigate the frequency of ectopic and super-numerary parathyroid glands in our series of renal hyperparathyroidism. From October 2011 to November 2014, 202 patients with chronic renal failure and advanced SHPT non-responsive to medical therapy were hospitalized in the General Surgery Department of the Carol Davila Nephrology Hospital. These patients underwent a number of 188 (93%) total para-thyroidectomies and a number of 14 patients (7%) subtotal parathyroidectomies. Of these 202 patients, reoperation was carried out for 14 patients (7%) in which we identified ectopic and supernumerary parathyroid glands. Operative details and pathology results were prospectively collected and reviewed after we obtained informed consent for data and pictures use. In 188 patients (93% cases), four or more parathyroid glands were removed at the first operation. In 14 cases (7%) high PTH level persisted after the initial operation. In 22 of them (11%), supernumerary glands were found at the first operation and in 6 of them (3%) at the second operation. We conclude that extensive cervical exploration in addition with preoperative imaging tests, parathyroid ultrasound; scintigraphy with Tc will reduce secondary hyperparathyroidism surgery.

Key words: secondary hyperparathyroidism (SHPT), parathyroidectomy, ectopic & supernumerary