## Clinical Aspects of Parathyroid Hyperplasia in Secondary Renal Hyperparathyroidism

Costin Pasnicu, Petru Adrian Radu, Dragos Garofil, Iustin Bengulescu, Vlad Paic, Anca Tigora, Florian Popa, Victor Strambu, Mircea Bratucu

Department of Surgery, Carol Davila Clinical Hospital of Nephrology, Bucharest, Romania

## **Abstract**

The secondary hyperparathyroidism (sHPT) affects all patients with chronic renal failure in different degrees. The chronic kidney disease is often associated with multiple severe comorbidities, therefore the figures for mortality are higher than in the general population. The failure of medical treatment is an indication for surgical treatment. The recurrence of the disease in secondary hyperparathyroidism after surgical treatment using total parathyroid with autotransplantation or subtotal parathyroidectomy may be a challenge due to hyperplasia of the remaining tissue. The purpose of this retrospective study was to highlight the risk factors for the occurrence of glandular hyperplasia in patients with secondary hyperparathyroidism and to determine optimal surgery approach for secondary hyperparathyroidism in order to minimize relapse rates. Parathyroid size evaluation may suggest the presence of nodular hyperplasia contributing to an early parathyroidectomy and at the same time selecting the best surgical treatment for sHPT patients. As resistance to medical therapy is due to the presence of nodular hyperplasia, some authors recomends subtotal parathyroidectomy with the excision of these glands, with the remaining parathyroids tissue and function controlled by medical therapy (20).

**Key words:** secondary hyperparathyroidism, chronic renal failure, paratiroidectomy, stereo-microscopy