Benign and Malignant Thyroid Gland Diseases In The Patients with Primary Hyperparathyroidism

Mehmet Celik¹, Sibel Guldiken¹, Semra Ayturk¹, Buket Yilmaz Bulbul¹, Ebru Tastekin², Nuray Can², Atakan Sezer³, Funda Ustun⁴, Ahmet Kucukarda¹

¹Trakya University, Medical Faculty, Department of Endocrinology and Metabolism, Edirne, Turkey
²Trakya University, Medical Faculty, Department of Pathology, Edirne, Turkey
³Trakya University, Medical Faculty, Department of Surgery, Edirne, Turkey
⁴Trakya University, Medical Faculty, Department of Nuclear Medicine, Edirne, Turkey

• **Aim:** This study aimed to evaluate concurrently detected thyroid pathologies in the patients who underwent surgery for primary hyperparathyroidism.

• **Materials and Methods:** In this study, we retrospectively analyzed the files of the patients who underwent surgery for primary hyperparathyroidism between 2012-2015. Pre-operative and post-operative laboratory examination results and the results of pre-operative radiological and nuclear medicine studies of the patients were retrospectively recorded.

• **Findings:** A total number of 41 patients with primary hyperparathyroidism were divided into two groups as the group with primary hyperparathyroidism and benign thyroid pathology (21 patients) and the group with primary hyperparathyroidism and malignant thyroid pathology (20 patients). In the group 1, 18 and 3 of 21 subjects were females and males, respectively. The patient group 2 included 15 male and 5 female patients. The mean age of the subjects were found to be 55.6 and 53.9 years in group 1 and group 2, respectively. Both groups were matched for age and gender. In terms of thyroid pathology, 20 of 41 patients (48.7%) who underwent total thyroidectomy for primary hyperparathyroidism were found to have thyroid papillary carcinoma, while benign pathologic conditions were detected in 21 (51.3%) individuals.

• **Conclusion:** Co-occurrence of thyroid diseases and primary hyperparathyroidism is common. Therefore, all patients should be pre-operatively evaluated for the presence of thyroid pathology to determine the technique of parathyroid surgery.