

## Retrospective Analysis of Patients with Hypoparathyroidism

Güven Barış Cansu, Bengür Taşkıran

Yunus Emre State Hospital, Eskişehir, Turkey

### Abstract

**Aim:** Hypoparathyroidism is characterized by absence or inappropriately low level of parathyroid hormone (PTH). The most common cause is surgical removal or damage of parathyroid glands. Other causes are autoimmune and infiltrative disorders. We present data of our patients diagnosed with hypoparathyroidism.

**Methods:** The clinical and laboratory data of patients with hypoparathyroidism during years between 2013-2018 were retrospectively evaluated.

**Results:** Data of 84 female (82.4%) and 16 male (17.6%) patients were analyzed. The cause of hypoparathyroidism was surgery for multinodular goiter in 72, surgery for thyroid cancer including lymph node dissection in 16, surgery for PHPT in 7 cases and idiopathic in 7 cases. Mean PTH level was  $6.18 \pm 5.14$  pg/ml, lowest level of calcium corrected for serum albumin  $6.4 \pm 0.9$  mg/dl, mean phosphorus

level measured at the same time was  $5.3 \pm 1.0$  mg/dl. Daily need of elementary calcium was  $1512 \pm 1115$  mg and cholecalciferol was  $0.68 \pm 0.32$  mcg. There was no difference between female and male patients regarding etiology, age, PTH level, and daily dosage of elementary calcium and cholecalciferol, while serum calcium and phosphorus levels differed significantly ( $p < 0.01$  and  $p = 0.014$ , respectively). PTH was negatively correlated ( $p = 0.019$ ,  $r = -0.233$ ), with daily elementary calcium need and positively with ( $p = 0.026$ ,  $r = 0.225$ ) daily cholecalciferol need.

**Conclusion:** The most common cause of hypoparathyroidism was surgery in accordance with the literature. Daily calcium and cholecalciferol need was also similar to the present knowledge. Since most of the data in the literature come from developed countries, we need larger scale studies to evaluate causes and treatment approaches of hypoparathyroidism in Turkey.