



# PRIMARY HYPERPARATHYROIDISM ASSOCIATED WITH ATRIAL SEPTAL DEFECT, INTERATRIAL SEPTAL ANEURYSM AND SKELETAL ANOMALY: A CASE REPORT



Neslihan CUHACI<sup>1</sup>, Burçak POLAT<sup>1</sup>, Berna EVRANOS<sup>2</sup>, Telat KELEŞ<sup>3</sup>, Reyhan ERSOY<sup>2</sup>, Bekir ÇAKIR<sup>2</sup>

<sup>1</sup> Ataturk Education and Research Hospital, Department of Endocrinology and Metabolism, Ankara, TURKEY

<sup>2</sup>Yıldırım Beyazıt University Faculty of Medicine, Department of Endocrinology and Metabolism, Ankara, TURKEY

<sup>3</sup>Yıldırım Beyazıt University Faculty of Medicine, Department of Cardiology, Ankara, TURKEY

## BACKGROUND

➤ The classic clinic manifestation of primary hyperparathyroidism (PHPT) is osteitis fibrosa cystica, a severe skeletal disease characterized by brown tumors, bone cysts and deformities, due to extremely elevated bone resorption elicited by continuously high parathyroid hormone (PTH) levels.

➤ In cardiovascular system there may be shortened QT interval, deposition of calcium in heart valves, coronary arteries, and myocardial fibers.

➤ Here, we report a case with PHPT, who have anorexia nervosa, skeletal anomaly, atrial septal defect (ASD) and interatrial septal aneurysm.

## CASE

➤ An 18-year-old woman, who has anorexia nervosa has applied for constipation. She had bradycardia, low weight (Body mass index: 15 kg/m<sup>2</sup>), and prognathism.

➤ The radiographic finding of the extremities showed that, bilaterally 2 and 5 metacarpals of the hands, and bilaterally 1, 3, 4, 5 metatarsals of the feet were short.

➤ Laboratory tests revealed hypercalcemia, hypophosphatemia and hyperparathyroidism. 24-hour urinary calcium was 504 mg/day. The neck ultrasound revealed a 4.9x6.8x10.4 mm hypoechoic lesion in the outside of the thyroid right lobe inferior.

➤ Sestamibi scintigraphy results were consistent with parathyroid adenoma. Renal ultrasonography determined milimetric crystalloids in the right kidney. Bone mineral densitometry revealed osteopenia.

➤ Her electrocardiography showed shortened QT interval and bradycardia. Echocardiography revealed an ASD and interatrial septal aneurysm.

➤ Her pituitary hormonal levels were consistent with panhypopituitarism. She had also evaluated for the eye, ear and nose anomaly, but no pathology was found.

➤ After the diagnosis and emergency treatment for hypercalcemia she had underwent parathyroidectomy. Histopathology was consistent with parathyroid adenoma. Postoperative her calcium and parathyroid levels were reduced in normal levels.

Picture 1. MIBI scan of the patient



Picture 2. A. Hand X-ray of the patient B. Foot X-ray of the patient



## CONCLUSION

➤ Our case revealed hypercalcemia and hyperparathyroidism and also unusual manifestations like anorexia nervosa, ASD, interatrial septal aneurysm and skeletal anomaly.

➤ In the literature to our knowledge, there is only one case with PHPT and ASD associated with mongoloid features.

➤ In conclusion, the patients with PHPT may be evaluated for atypical manifestations of cardiac and skeletal system.