

BASAL GANGLIA CALCIFICATIONS SECONDARY TO IDIOPATHIC HYPOPARATHYROIDISM – A SIMILAR BUT DIFFERENT PATHOLOGY FROM THE FAHR’S SYNDROME: CASE REPORT

I. Alimehmeti¹, V. Hoxha¹, S. Grabova², M. Papajani², A. Ylli¹, J. Kruja²

¹Endocrinology Service and ²Neurology Service, Universitary Hospital Centre "Mother Theresa", Tirana, Albania

Background: One of the most frequent denominations of bilateral basal ganglia calcification is Fahr’s syndrome. In this autosomal dominant or sporadic bilateral basal ganglia calcinosis there are no known calcium metabolism abnormalities. Secondary bilateral basal ganglia calcification is known to occur in several other conditions, including hypoparathyroidism.

Case report: A male patient, 56 years old, presented to the Endocrinology Service complaining for continuous severe headache, dizziness, memory and concentration problems, speech and gait difficulties. He was diagnosed with hypocalcemia 10 years ago and was not properly treated. The patient refers that he had suffered three TIA-like episodes 2 years ago, for which reason he underwent to a head computerized tomography exam. The exam revealed diffuse basal ganglia calcifications and in the gray-white matter interface. One month before presenting to the Endocrinology Service he was subject to a MRI, which demonstrated diffuse lesions of the periventricular cerebral and cerebellar white matters, and numerous bilateral basal ganglia and cerebellar mineralisations. Neurological examination revealed no neurological deficits, except a mild bradykinesia. Thyroid and parathyroid ultrasound exam was normal. No neck trauma, irradiation or surgery was referred. Parathormone level 0.1 pg/ml (10-65). Total calcium 4.8 mg/dl (8.5-10.5). Ionized calcium 2 mg/dl (4.8-5.2). Phosphorus 5.4 mg/dl (2.5-4.5). No autoimmunity was revealed by blood exams. Eventually, by exclusion, idiopathic hypoparathyroidism was diagnosed and the cerebral and cerebellar calcifications were considered secondary calcifications due to calcium and phosphorus abnormalities.

Conclusion: Fahr’s syndrome must not be incorrectly diagnosed if calcium and phosphorus abnormalities are present.