

From Horner's syndrome to primary hyperparathyroidism – a case report

¹Maria Kurowska, ¹Joanna Malicka, ²Witold Chudziński, ¹Jerzy S. Tarach

Department of Endocrinology, Medical University of Lublin

Department of General, Vascular and Transplant Surgery, Medical University of Warsaw

Poland



Introduction. Horner's syndrome represents a clinical sign that may result from a variety of lesions both in the central and peripheral nervous system. There is a combination of ipsilateral ptosis, pupillary miosis and anisocoria, enophthalmos and facial anhidrosis induced by disruption of the sympathetic innervation of the eye anywhere along its three-neuron trail. Tumors are the most frequent causes of Horner's syndrome.

Aim of the study was to present a rare case of patient with Horner's syndrome caused by parathyroid adenoma.

Case report. 50 year-old man was initially diagnosed in neurology ward because of right Horner's syndrome in the form of ptosis, pupillary miosis, and enophthalmos. CT of the neck disclosed 30x26x16 mm homogenous solid tumor strictly adhering to the posterior contour of the right lobe of the thyroid with initial density 56 HU. Differential diagnosis included: atypical part of the thyroid gland, parathyroid adenoma or paraganglioma (in MRI). ^{99m}Tc-MIBI parathyroid scintigraphy revealed an area of increased tracer accumulation that could correspond to enlarged right parathyroid gland. PTH level was 347-426 pg/ml [n<72], total calcium level 11.8-12.9 mg/dl [n<10.4], ionized calcium 1.64-1.67 mmol/l [n<1.32]. Low concentration of serum phosphorus [2,3 mg/dl] and increased urine calcium excretion [570-950 mg/24h, n<300] were also observed. 25(OH)D3 blood level was 14.39 ng/ml [n>30]. Due to the suspicion of PTH-secreting paraganglioma daily urine excretion of methoxycatecholamines [913 and 742 µg/24h; n<1000] and biopsy of the lesion [parathyroid tissue] have been done. During surgery a tumor of the right upper parathyroid gland has been removed. The postoperative pathologic examination revealed 4.5x2.5x1.3cm parathyroid adenoma. The Horner's syndrome symptoms [fig.1] did not resolve after surgery [fig. 2].

Conclusion. Among the many causes of Horner's syndrome, parathyroid tumor should be taken into account in the differential diagnosis.

Fig. 1. Horner's syndrome in our patient before [1] and [2] after surgery.



Fig. 2. Fusion of CT and sestamibi scans showing a pathological contrast enhancement together with an increased isotope accumulation in the right part of the neck.

