ENDOCRINE IMAGE

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Extensive Intracranial Calcification in Idiopathic Hypoparathyroidism

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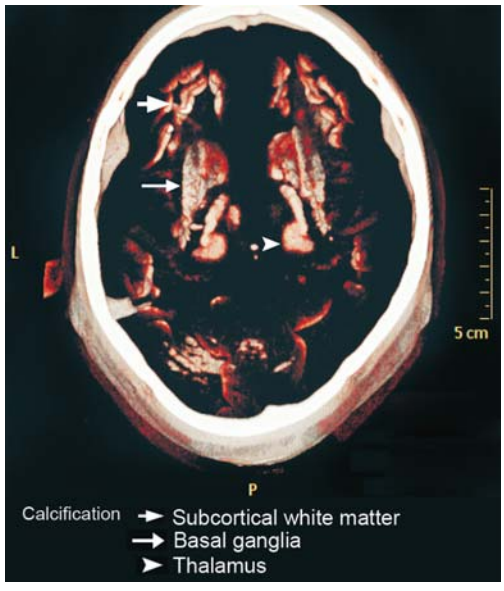

Fig. 1: Volume rendered noncontrast-enhanced CT image, performed on 64 slice multidetector row scanner (Brilliance CT, Philips Medical systems, Cleveland, OH), revealed bilateral symmetric calcification involving basal ganglia, thalami, subcortical white matter, corona radiata and cerebellum

SUMMARY

A 35-year-old male presented to Department of Endocrinology with history of rapid, nonpatterned, and semi-purposeful involuntary movements of both upper and lower limbs with unsteady gait and muscle stiffness. History of cataract surgery and tonic-clonic seizures was present. Chovstek's sign and Trousseau's sign were negative. Serum chemistry showed S.creatinine 1.1 mg/dl, albumin 4.0 mg/dl, S Ca 6.0 mg/dl (reference range:8.5-10.5 mg/dl), S phosphorus 6.3 mg/dl (reference range 3.0-4.5 mg/dl), S alkaline phosphatase 235 IU/l (reference range 50-150 IU/l), iPTH(IRMA) < 13.8 pg/ml (reference range: 9-55 pg/ml), 25(OH)D3 55.46 ng/ml (reference range > 30 ng/ml) and sTSH 1.11 µIU/ml (reference range 0.3-5 µIU/ml). He was diagnosed as idiopathic hypoparathyroidism. This case has rare presentation with extensive basal ganglia calcification.

Letter to Editor

Surgeon-performed Ultrasound in Preoperative Parathyroid Localization: The Cutting Edge of Endocrine Surgeon

At the outset, the expertise and results with Surgeon Performed Ultrasound (SPU) shown by the authors[1] is encouraging, but I have few queries and comments to put forth. Firstly, what would be your suggested approach for familial hyperparathyroidism (HPT) and asymmetrical hyperplasia especially when the sonographic findings of parathyroid adenoma (PT) is a function of size/ mass?[2] Secondly, there is no mention of number of familial HPT cases and sestamibi (MIBI) findings in your series? Thirdly, did you have any problem with thyroid incidentalomas given the very high rate of incidental thyroid nodules in the community.[3] Fourthly, though the 96% success rate is desirable, 13.1% conversion rate is uncomfortably high in the era of minimally invasive parathyroidectomy (MIP). A concordant MIBI + ultrasound reduces the conversion rate significantly.[4] Lastly, in our opinion the SPU is limited to logistic value than objective clinical benefit, till more experience establishes the role of SPU.

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Author's Response

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For familial hyperparathyroidism (HPT) especially MEN 1, the approach adopted is total parathyroidectomy with autotransplantation of parathyroid gland. In this study there were two patients with familial HPT, i.e. one patient with MEN 1 and another patient with MEN 2B. Although combination of US and sestamibi (MIBI) no doubt will give better result unfortunately, MIBI is not available in our hospital, therefore it was not done routinely to all patient in this study in those diagnosed with primary hyperparathyroidism. On the contrary, thyroid incidentalomas are not uncommon. For a single thyroid nodule with size more than 1 cm, FNAC was obtained first before surgery. However, in multinodular goiter involving both lobes and even without suspicious nodule on US, we advocate bilateral neck exploration as the procedure of choice.