

[PICTURES IN CLINICAL MEDICINE]

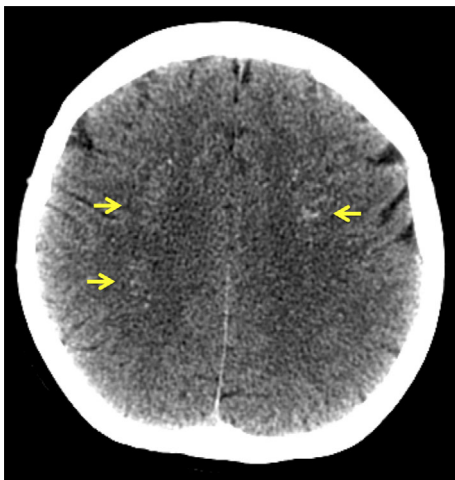
Pseudohypoparathyroidism Causing Multiple Brain Calcifications

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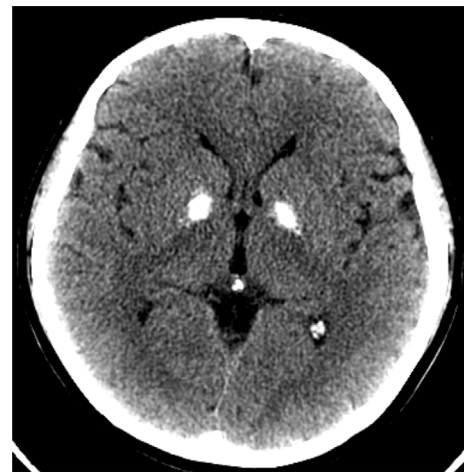
Key words: pseudohypoparathyroidism, brain calcification, Trousseau's sign, hypocalcemia

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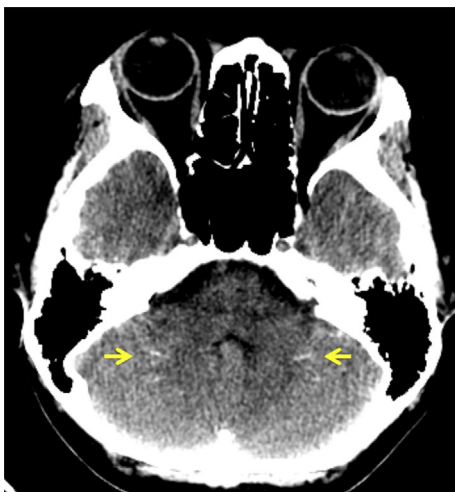
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Picture 1.



Picture 2.



Picture 3.

medical and family history presented with the sudden onset of intermittent numbness of the right hand fifth finger. Computed tomography of the head revealed extensive calcification in the bilateral globi pallidi, dentate nuclei, and subcortical white matter (Picture 1-3). However, she did not have any neurological manifestations, such as movement disorder, extrapyramidal signs and cerebellar dysfunction. Trousseau's sign was observed without hyperventilation and it caused her intermittent numbness. Her serum calcium level was 6.1 (normal 8.7-10.3) mg/dL. Serum phosphate, magnesium, and 1, 25-(OH)₂ vitamin D levels and thyroid and renal function were normal; intact-parathyroid hormone (PTH) level was 193 (normal 10-65) pg/mL. A diagnosis of pseudohypoparathyroidism was thus made. There was no calcification observed at any other sites characteristic for this disease. She had no physical characteristics typical of Albright's hereditary osteodystrophy and she was classified as type 1b. Her serum calcium levels thereafter normalized and the symptoms disappeared following alfacalcidol treatment. Pseudo-

A 51-year-old Japanese woman without any particular

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hypoparathyroidism is rare metabolic disorder which is caused by a dysfunction of PTH receptor and its signal transduction pathway (1). High calcification in the brain can cause seizures (2). Pseudohypoparathyroidism should therefore be considered when obvious, widespread calcification is observed in the brain irrespective of the patient's age.

The authors state that they have no Conflict of Interest (COI).

References

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