



## Fahr's syndrome

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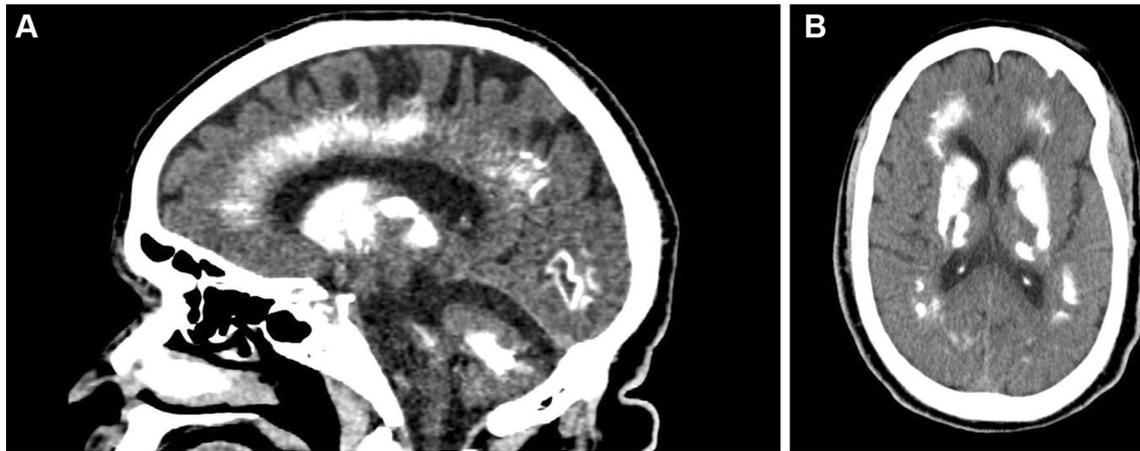
A 53-year-old African-American man with a history of intellectual disability and seizure disorder was brought to the hospital for generalized tonic–clonic seizure and postictal confusion. His anti-seizure medications were discontinued 6 months prior to presentation following a prolonged seizure-free period. Computed tomography (CT) of the head demonstrated extensive calcifications involving bilateral periventricular white matter, basal ganglia, thalami, pons and cerebellar hemispheres (Fig. 1). Review of external records revealed a history of Fahr's syndrome, consistent with the imaging findings. A thorough family history could not be obtained. He did not have any metabolic abnormalities except for hypocalcemia, which was secondary to chronic idiopathic hypoparathyroidism. His calcium and vitamin D supplements were adjusted accordingly. Patient's anti-seizure medications were resumed and he was discharged in stable condition.

Fahr's disease, also known as bilateral striopallidodentate calcinosis or idiopathic basal ganglia calcification is a rare sporadic or familial neurodegenerative condition characterized by symmetrical calcification of the basal ganglia and other brain regions. The manifestations include, but are not limited to, cognitive impairment, psychosis, seizures, Parkinsonism and other movement disorders [1]. Though often used interchangeably, some authors recommend using the term Fahr's 'syndrome' instead of 'disease' when the age of onset is earlier (typically in 4th and 5th decades), and there are associated endocrinopathies (e.g., hypoparathyroidism as in our patient) or systemic diseases (e.g., tuberous sclerosis) [2]. There is neither a cure, nor a standard course of treatment for Fahr's syndrome. Treatment is primarily symptomatic.

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**Fig. 1** Sagittal (a) and coronal (b) views of the CT scan of the head demonstrating extensive calcifications involving bilateral periventricular white matter, basal ganglia, thalami, pons and cerebellar hemispheres

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**Informed consent** Informed consent was obtained from the patient's next of kin.

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### Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

**Statement of human and animal rights** This clinical image complies with the ethical standards outlined in the journal. This case study was not a formal research involving human participants or animals.

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