



# Intracranial hemorrhage in a patient with **Urbach-Wiethe disease**

## Hemorragia intracraniana em paciente com doença de **Urbach-Wiethe**

Ana Luisa de Carvalho Cardozo Hernández<sup>1</sup> Gabriel Saboia de Araújo Torres<sup>1</sup> Thiago Trajano da Silva<sup>1</sup> Gisela Tinone<sup>1</sup> Lucas Fernandes Ferreira<sup>1</sup> João Paulo Motta Telles<sup>1</sup> Fernando Freua<sup>1</sup> Leandro Tavares Lucato<sup>2</sup>

Arq. Neuro-Psiquiatr. 2024;82(11):s00441789227.

Address for correspondence Ana Luisa de Carvalho Cardozo Hernández (email: ana.hernandez@hc.fm.usp.br)

A 39-year-old man presented with headache, left hemiparesis, and apathy. He also had epilepsy and hoarseness since infancy, tongue frenulum thickening, and yellow papular lesions

around his eyelids and fingers (>Figure 1). The computed tomography (CT) scan showed right frontal lobe hemorrhage, with "comma" shaped calcifications in both amygdalae,



Figure 1 Signs related to Urbach-Wiethe disease: (A) Dry skin and hyperkeratotic plaques on the left hand. (B) Thickened tongue frenulum. (C) Early alopecia on the top of the scalp and decreased hair density. (D) Beaded papular lesions on the eyelids, resembling a pearl necklace, also known as moniliform blepharosis.

received May 24, 2024 accepted June 9, 2024

DOI https://doi.org/ 10.1055/s-0044-1789227. ISSN 0004-282X.

Editor-in-Chief: Ayrton Roberto

Associate Editor: Antonio José da Rocha.

© 2024. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution 4.0 International License, permitting copying and reproduction so long as the original work is given appropriate credit (https://creativecommons.org/licenses/by/4.0/).

Thieme Revinter Publicações Ltda., Rua do Matoso 170, Rio de Janeiro, RJ, CEP 20270-135, Brazil

<sup>&</sup>lt;sup>1</sup>Universidade de São Paulo, Faculdade de Medicina, Departamento de Neurologia, São Paulo SP, Brazil.

<sup>&</sup>lt;sup>2</sup>Universidade de São Paulo, Faculdade de Medicina, Departamento de Neurorradiologia, São Paulo SP, Brazil.

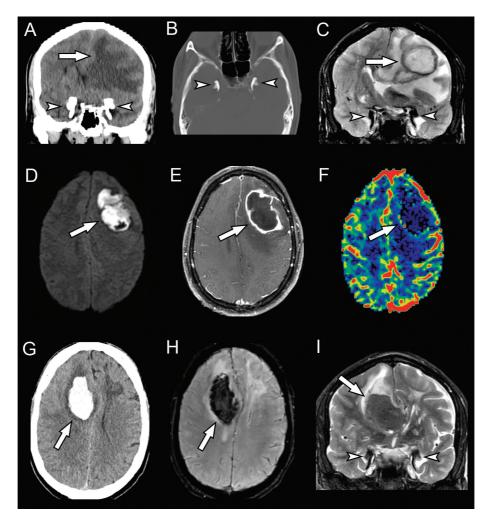


Figure 2 A noncontrast CT scan (A) demonstrates amygdalae comma-shaped calcifications (arrowheads) and hypoattenuation in left frontal lobe (arrow). A CT scan of the bone window (B) also shows calcifications (arrowheads). The coronal T2WI (C) depicts hypointense calcifications (arrowheads) and a lesion in left frontal lobe (arrow). Both DWI (D) and postcontrast T1WI (E) show central restricted diffusion and peripheral enhancement; no significant change in CBV color maps (F) is noted (arrows), suggesting an abscess. After 4 years the patient returned with an intraparenchymal hemorrhage in the right frontal lobe, seen in the noncontrast CT scan (G), SWI (H), and coronal T2WI (I) (arrows). Again, there are signs of calcification (arrowheads in I).

a characteristic finding of the Urbach-Wiethe disease (>Figure 2). Previously, he presented with an intracranial pyogenic abscess due to poor dentition, perhaps related to hyaline deposits found along the parotid duct in these patients.<sup>1</sup> The whole exome sequencing shows a biallelic pathogenic variant c.816\_817del (p.Cys272\*) in the ECM1 (Figure 2). Urbach-Wiethe disease is an autosomal recessive disorder, with hyaline-like material deposition in the skin, mucosae, and viscera.<sup>2,3</sup> Neurological features include seizures, neuropsychiatric manifestations, intracranial hemorrhages, and calcifications in the mesial temporal lobes.<sup>4</sup>

#### **Authors' Contributions**

ALCCH: conceptualization, visualization, writing - original draft, writing – review & editing. GSAT: conceptualization, visualization, writing - review & editing. TTS: conceptualization, writing - original draft. LFF, JPMT: validation, writing - review & editing. GT: supervision, validation, writing review & editing. FF: conceptualization, visualization, supervision, writing - review & editing. and LTT: conceptualization, supervision, writing - review & editing.

### Conflict of Interest

The authors have no conflict of interest to declare.

#### References

- 1 Frenkel B, Vered M, Taicher S, Yarom N. Lipoid proteinosis unveiled by oral mucosal lesions: a comprehensive analysis of 137 cases. Clin Oral Investig 2017;21(07):2245-2251. Doi: 10.1007/s00784-016-2017-7
- 2 Hamada T. Lipoid proteinosis. Clin Exp Dermatol 2002;27(08): 624-629. Doi: 10.1046/j.1365-2230.2002.01143.x
- 3 Mirancea N, Hausser I, Beck R, Metze D, Fusenig NE, Breitkreutz D. Vascular anomalies in lipoid proteinosis (hyalinosis cutis et mucosae): basement membrane components and ultrastructure. J Dermatol Sci 2006;42(03):231–239. Doi: 10.1016/j.jdermsci.2006.01.004
- 4 Messina MJ, Nuzzaco G, Barbieri A, et al. Spontaneous intracerebral hemorrhage in Urbach-Wiethe disease. Neurology 2012;79 (16):1740-1741. Doi: 10.1212/WNL.0b013e31826e9a49