

Illustration of a patient with stroke developing ipsilateral tremor-like grasp phenomenon

Ilustração de um paciente com acidente vascular cerebral desenvolvendo fenômeno de prensão tipo tremor ipsilateral

Halil Onder¹ Asim Kilic¹ Selcuk Comoglu¹

¹ Diskapi Yildirim Beyazit Training and Research Hospital, Neurology Clinic, Ankara, Turkey.

Address for correspondence Halil Onder
(email: halilonder@yahoo.com).

Arq. Neuropsiquiatr. 2023;81(2):212–213.

An 83-year-old right-handed woman with coronary artery disease (CAD) was admitted due to acute-onset confusion, visual impairment, and right-sided paresis. Upon admission, the patient was lethargic and disorientated in terms of time and place. The visual field examination revealed right-sided homonymous hemianopsia, and the motor examination revealed paralysis on the right side (which was of grade 4 according to the medical research council). She also had the grasp reflex on her left hand. A Cranial magnetic resonance imaging (MRI) scan revealed acute infarction in the territory of the left posterior cerebral artery (PCA) (► **Figure 1**). On the second day of follow-up, the patient developed ipsilateral involuntary movements of her left hand and foot that were compatible with the tremor-like grasp phenomenon (► **Video 1**).^{1,2} Of note, a routine electroencephalogram (EEG) did not show an epileptiform discharge. The movements were fully recovered one week later without additional interventions. We herein report a very rare entity of a motor symptom ipsilateral to an acute brain injury that has been hypothesized to be due to hyperexcitation of the frontal lobe, contralateral to the movements.²

Video 1

Video of the patient recorded on the second day of admission, showing involuntary movements in her left hand and foot that were stereotypical, sometimes rhythmical, and accompanied by groping or picking-like movements. Of note, these tremor-like involuntary movements were ipsilateral to the side of the infarction. <https://www.arquivosdeneuropsiquiatria.org/anp-2022-0160-video/> Online content including video sequences viewable at: <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0043-1763488>.

Authors' Contributions

HO, SC: concept; HO: design, analysis and/or interpretation, and writing of the manuscript; SC: supervision, critical review; HO, AK, SC: materials, literature search; HO, AK: data collection and/or processing.

received
July 25, 2022
received in its final version
September 13, 2022
accepted
October 10, 2022

DOI <https://doi.org/10.1055/s-0043-1763488>.
ISSN 0004-282X.

© 2023. Academia Brasileira de Neurologia. All rights reserved.
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

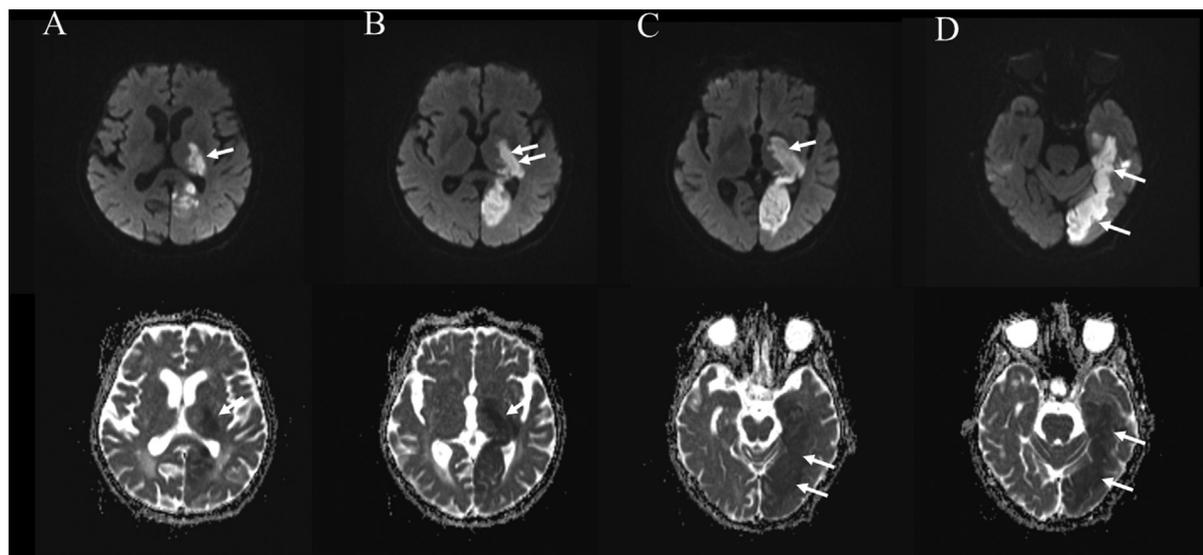


Figure 1 The diffusion-weighted imaging (DWI) and apparent diffusion coefficient (ADC) sequences show the acute diffusion restriction in the vascular territory of the right posterior cerebral artery. The figure shows the lateral portion of the thalamus (A-C), the posterior limb of the internal capsule (B-C), the inferior temporal lobe (D), and the occipital lobe (C-D) (arrows). The DWI sequences are illustrated in the upper part of the figure, and the ADC images are illustrated in the lower part of the figure.

Conflict of Interest

The authors have no conflict of interests to declare.

- 2 Inatomi Y, Nakajima M, Yonehara T, Ando Y. Ipsilateral Tremor-Like Grasp Reaction in a Patient With Ischemic Stroke. *Cogn Behav Neurol* 2017;30(01):37–41

References

- 1 Inatomi Y, Suzuki Y, Nakajima M, Yonehara T. Tremor-like grasp phenomenon: case series study. *Neurol Sci* 2022;43(10): 5927–5932