

# Acute Parkinsonism and basal ganglia lesions after wasp sting

## *Parkinsonismo agudo e lesões de núcleos da base relacionados a picada de vespa*

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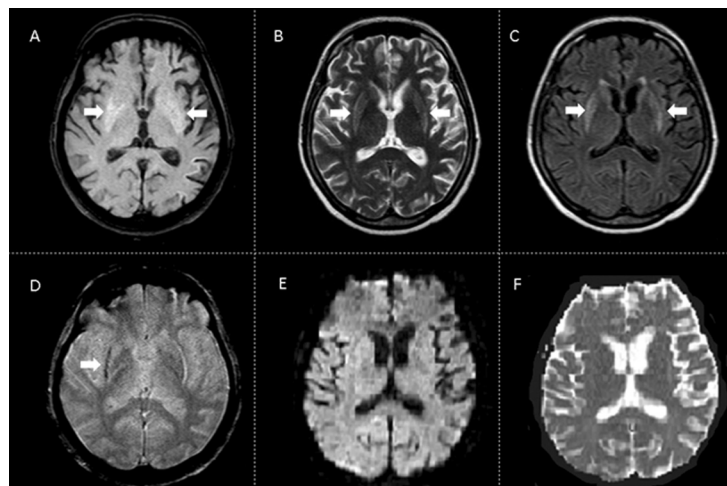
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Arq. Neuropsiquiatr. 2022;80(8):869–870.

A 52-year-old woman presented with acute malaise, syncope, and confusion after a wasp sting. Examination showed

cognitive impairment, bradykinesia, and rigidity. Brain magnetic resonance imaging (MRI) scan disclosed symmetric



**Figure 1** Brain MRI. Panel A shows symmetrical bilateral caudate nuclei and putamina T1 hyperintense signal (white arrows). Panels B and C show bilateral T2 and fluid-attenuated inversion recovery (FLAIR) weighted hyperintensities in the same structures (white arrows). Panel D shows iron deposition in the right external capsule in T2-GRE (white arrow). No restricted water diffusion was shown in DWI/ADC map (Panels E and F). After gadolinium injection, there was no contrast enhancement (image not shown).

received  
 January 25, 2022  
 accepted  
 March 15, 2022

DOI <https://doi.org/10.1055/s-0042-1755215>.  
 ISSN 0004-282X.

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bilateral basal ganglia hyperintense signal (► **Figure 1**). Serum specific wasp-venom immunoglobulin E (IgE) antibodies were strongly positive. The cerebrospinal fluid (CSF) and general blood tests, as well as the electroencephalography (EEG), were normal. She had mild improvement with levodopa, and at 6-months of follow-up MRI she showed remaining basal ganglia lesions.

Anaphylaxis after insect sting (*Hymenoptera*) may cause several systemic manifestations such as diarrhea, sneezing, cutaneous rash, and angioedema. Neurological features may include agitation, headache, dizziness, confusion, extrapyramidal signs, and encephalitis.<sup>1,2</sup> Basal ganglia necrosis-associated Parkinsonism has been previously reported.<sup>3</sup>

#### Author's Contributions

TFAA: study design, patient data collectin and manuscrit writing; KLSO: patient data collectin and manuscrit writ-

ing; MERB, JLP, CMRF, ESM: data interpretation and manuscript critical review.

#### Conflict of Interest

The authors have no conflict of interests to declare.

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