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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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...
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.1,2 Basal ganglia necrosis-associated Parkinsonism has been previously reported.3

Author’s Contributions
TFAA: study design, patient data collection and manuscript writing; KLSO: patient data collection and manuscript writing; MERB, JLP, CMRF, ESM: data interpretation and manuscript critical review.

Conflict of Interest
The authors have no conflict of interests to declare.

References
2 Maramattom BV. Wasp sting-related allergic encephalitis. Pract Neurol 2021;21(06):515–517. Doi: 10.1136/practneurol-2021-003007