

Acute parkinsonism and bilateral basal ganglia lesions

Parkinsonismo agudo e lesão bilateral nos núcleos da base

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A 58-year-old man with arterial hypertension and poorly controlled type 2 diabetes using glyburide/metformin presented a history of sudden slurred speech and gait disturbance eight days before clinical evaluation. Neurological examination disclosed dysarthria, postural instability and bradykinesia. Laboratory investigations demonstrated low glucose (24 mg/dL), elevated urea nitrogen (168 mg/dL) and creatinine (8 mg/dL) levels. Cranial computerized tomography revealed lentiform “fork sign” (Figures 1A and 1C).

Acute bilateral basal ganglia lesions syndrome is a rare complication of uremia, occurring typically in diabetic patients and characterized by acute parkinsonism and/or involuntary movements¹. The pathogenesis is unclear and potential causes include metabolic acidosis^{1,2,3}, uremic toxins^{1,3}, hemodynamic changes (hypotension/heart failure)³ and diabetes¹. In the case reported, hypoglycemia may be implicated as a triggering factor. The patient’s symptoms improved after hemodialysis.

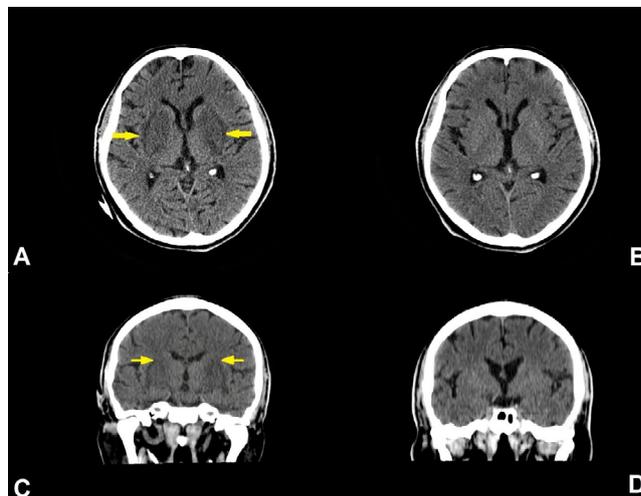


Figure 1. Axial and coronal cranial computerized tomography (A/C) — decreased density in bilateral lentiform nuclei surrounded by a more hypodense rim delineating them — fork-like structure. Cranial computerized tomography (B/D) — regression of lentiform nucleus lesions after three months.

References

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