A 63-year-old woman with type 2 diabetes mellitus on hemodialysis presented with subacute onset of slurred speech and difficulty walking after 1 week of inadvertent metformin use.

On examination, she had a wide-based gait, symmetric upper limb rigidity, bradykinesia, and slurred speech.

Brain MRI revealed a pattern of vasogenic edema with $T_2$/fluid-attenuated inversion recovery hyperintensity in the basal ganglia compatible with the lentiform fork sign (figure).

Basal ganglia pathology has been described on the setting of metabolic acidosis and metformin use in hemodialysis patients, resulting in a parkinsonian syndrome.

**AUTHOR CONTRIBUTIONS**

Gustavo C. Fernandes: drafting/revising the manuscript, study concept or design, accepts responsibility for conduct of research and final approval, study supervision. Tássia Koltermann: study concept or design, accepts responsibility for conduct of research and final approval, acquisition of data. Lillian Campos: drafting/revising the manuscript, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data. Leonardo Vedolin: drafting/revising the manuscript, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval. Carlos R.M. Rieder: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval.

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**DISCLOSURE**

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

**REFERENCES**


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**Figure**

The lentiform fork sign

(A) Axial noncontrast CT shows bilateral hypodensities in the basal ganglia. (B) Brain MRI reveals a pattern of vasogenic edema with $T_2$/fluid-attenuated inversion recovery hyperintensity in the basal ganglia compatible with the lentiform fork sign.
Teaching NeuroImages: The lentiform fork sign: An MRI pattern of metformin-associated encephalopathy
Gustavo C. Fernandes, Tâssia Koltermann, Lillian Campos, et al.
Neurology 2015;84:e15
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