

# An Elderly Patient with Recurrent Episodes of Hemi-Paresthesia

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## Key Words

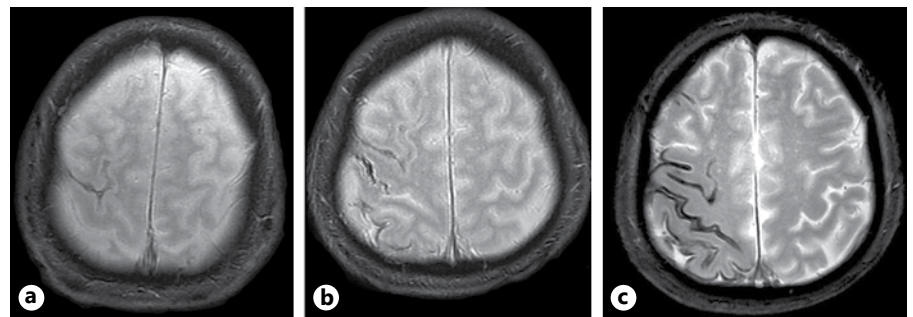
Amyloid angiopathy · Siderosis · PIB-PET

## Question

A 71-year-old man presented with recurrent episodes of paresthesia in the left limb and face that lasted for a few minutes. Plain and gadolinium-enhanced magnetic reso-

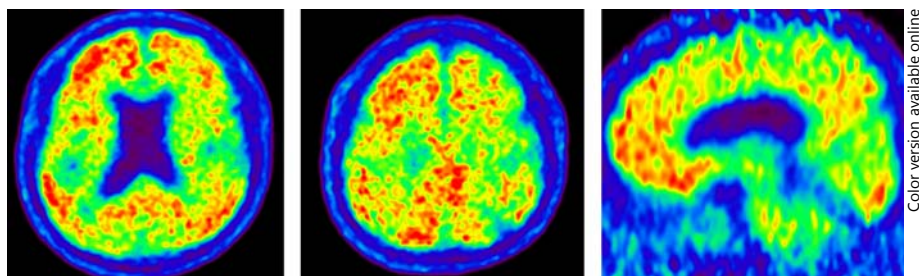
nance imaging (MRI) of the brain showed no abnormalities (not shown). Sequential T2\*-gradient echo (GRE) images revealed a progressively enlarged area of superficial siderosis on the right fronto-temporo-parietal cortex from 2009 to 2012 (fig. 1).

*What is your diagnosis?*



**Fig. 1.** T2\*-gradient echo MRI shows progressively worsening superficial siderosis on the right frontoparietal cortices (**a** 2009; **b** 2011; **c** 2012).

**Fig. 2.** 11C-Pittsburgh compound B (PIB)-PET image shows increased PIB uptake throughout the cerebral cortex.



Color version available online

## Answer

Cerebral angiography, EEG monitoring, CSF study, autoimmune and coagulopathy tests were all within normal limits. 11C-Pittsburgh compound B (PIB)-PET showed diffuse cortical amyloid deposits (fig. 2), a finding consistent with cerebral amyloid angiopathy (CAA). CAA is a small vessel disease characterized by the progressive deposition of amyloid- $\beta$  protein in the walls of cortical and leptomeningeal vessels. Although the most widely recognized clinical presentation is lobar hemorrhages in old individuals, CAA may manifest as transient, recurrent, stereotyped, and brief (usually <30 min) episodes of focal neurologic symptoms [1]. The underlying mechanisms remain uncertain but may include cortical spreading depression or focal seizures. Although definite diagnosis of CAA requires surgical biopsy, PIB-PET helps us make a diagnosis in vivo [2].

## Disclosure Statement

We have no disclosures to declare.

## References

- 1 Charidimou A, Baron JC, Werring DJ: Transient focal neurological episodes, cerebral amyloid angiopathy, and intracerebral hemorrhage risk: looking beyond TIAs. *Int J Stroke* 2013;8:105–108.
- 2 Ly JV, Donnan GA, Villemagne VL, Zavala JA, Ma H, O'Keefe G, Gong SJ, Gunawan RM, Saunder T, Ackerman U, Tochon-Danguy H, Churilov L, Phan TG, Rowe CC: 11C-PIB binding is increased in patients with cerebral amyloid angiopathy-related hemorrhage. *Neurology* 2010;74:487–493.