

Clinical Image

“Twinkle Stars” in the Dementia Brain

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A 68-year-old man with a history of rapid progression into severe dementia during 2 years was admitted due to confusion and weakness of the left lower extremity. A series of axial CT revealed high signal intensity spots in lobars performing one light after another, just liked twinkle stars in the sky. These lesions demonstrated no high signal intensity on GDTA-enhanced T1 weighted imaging and were revealed as microbleeds by SWI.

Rapidly progressive Alzheimer Dementia (rpAD) has recently been recognized by rapidly progressive cognitive decline and the early occurrence of focal neurological signs [1]. A higher prevalence of moderate to severe CAA has been reported in rpAD patients¹. Depending on SWI-MR defined lobar microbleeds, the diagnosis of CAA was made according to Modified Boston Criteria without the need for ‘gold-standard’ histopathology from biopsy [2] (Figure 1).

References

1. Abu-Rumeileh S, Capellari S, Parchi P. Rapidly Progressive Alzheimer's Disease: Contributions to Clinical-Pathological Definition and Diagnosis. *J Alzheimers Dis.* 2018; 63: 887-897.

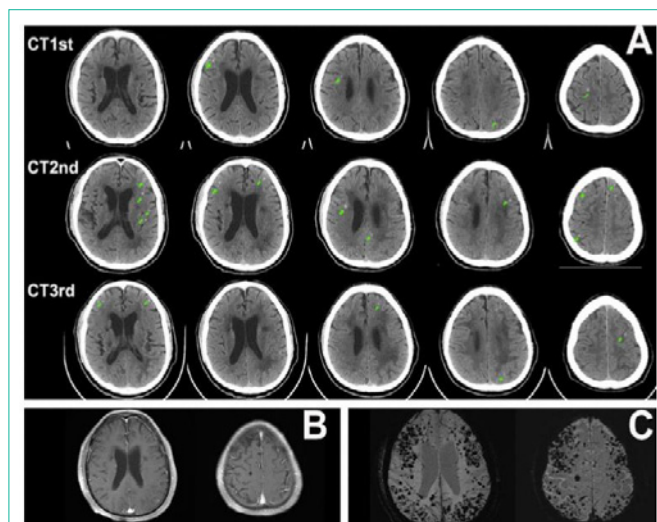


Figure 1: CT and MRI images of the brain.

The admission axial CT (Figure A CT1st) showed several hyperintensive spots (green arrows). 6 months later (Figure A CT2nd) many new hyperintensive spots occurred on same axial CT planes. 12 months later (Figure A CT3rd) most hyperintensive spots in CT2nd disappeared and new ones appeared. (Figure B) GDTA-enhanced T1 weighted imaging showed no enhancement of lesions, and (Figure C) susceptibility weighted imaging (SWI) showed clusters of black foci in lobars.

2. Haller S, Vernooij MW, Kuijter JPA, Larsson EM, Jäger HR, Barkhof F. Cerebral Microbleeds: Imaging and Clinical Significance. *Radiology.* 2018; 287: 11-28.