

# Images in Neurology: Cerebral Microbleeds Due To Amyloid Angiopathy

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## Citation

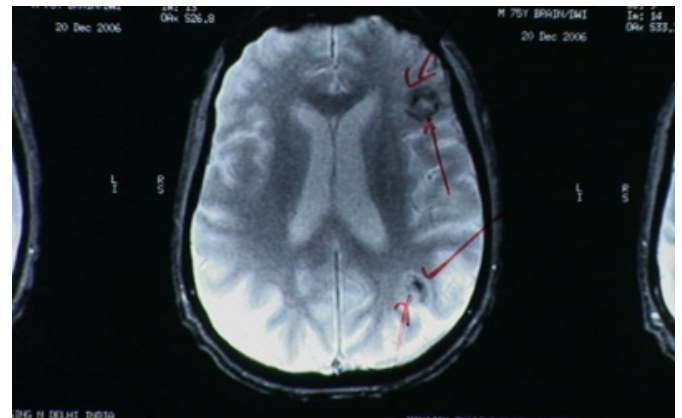
P Sethi, N Sethi, J Torgovnick. *Images in Neurology: Cerebral Microbleeds Due To Amyloid Angiopathy*. The Internet Journal of Neurology. 2006 Volume 6 Number 1.

## Abstract

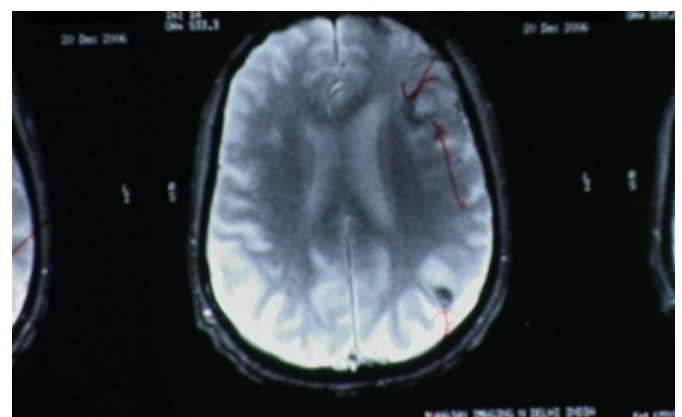
Cerebral amyloid angiopathy (CAA) refers to the deposition of beta amyloid in the small and medium sized arteries of the brain and predisposes the individual to primary intracranial hemorrhage (PICH), dementia and transient neurological events. A-75-year-old non-diabetic, normotensive male presented to us with history of sudden onset of abnormal behavior characterized by irrelevant talking and straying on the road for about 20 minutes followed by spontaneous recovery. At the time of presentation to the emergency room his neurological examination was non-focal with no deficits. Gradient echo brain magnetic resonance imaging (MRI) as a part of stroke work up revealed multiple small chronic hemorrhagic lesions (microbleeds) suggestive of CAA (Fig 1 and 2). CAA is an important cause of PICH in the elderly accounting for up to 10% of all PICH in this age group. Patients with CAA may remain asymptomatic or may present with transient ischemic attacks or a devastating PICH. A definitive diagnosis of CAA rests on pathological examination of the affected blood vessel however gradient echo magnetic resonance imaging is a sensitive and non-invasive technique and the presence, number and distribution of microbleeds has a strong correlation with future PICH and cognitive decline . It is important to request gradient echo sequences if a diagnosis of CAA is been considered as convention MRI sequences like diffusion weighted imaging may miss these microbleeds. Currently there is no effective treatment for CAA though research continues to find an effective anti-amyloid therapy. There are no clear guidelines regarding anti-thrombotic therapy in patients with CAA. It makes sense to treat cardiovascular risk factors like hypertensive, dyslipidemia and diabetes aggressively in these patients. The decision regarding anti-platelet therapy needs to be individualized taking into consideration the patient's cardiovascular profile. Our patient currently remains asymptomatic on daily aspirin therapy.

## Figure 1

Figure 1&2: Gradient echo magnetic resonance imaging showing multiple cerebral microbleeds suggestive of chronic hemorrhagic lesions.



## Figure 2



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**References**

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