H/O Migraines with Aura & Cognitive Impairment

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Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL)
Diffuse hypodensity (arrow)
Increased soft tissue contrast of MRI demonstrates the countless dilated perivascular spaces: “état criblé” (blue arrows) with intermixed chronic lacunar infarcts
White matter lesions (yellow arrows) Dilated perivascular spaces cause “état criblé” (blue arrow)
CADASIL

• Most common form of hereditary stroke disorder
• Caused by mutations of the Notch 3 gene on Chromosome 19
• TIA & Infarcts, manifestation #1
• Cognitive dysfunction, manifestation #2
• Migraine with aura in 20-40%
MRI

- Confluent white matter changes, and more circumscribed lesions in basal ganglia are common.
- Perivascular spaces become more prominent.
- DDx: multiple early age infarcts from a hypercoagulable state, MELAS, subcortical arteriosclerotic encephalopathy (SAE), Susac syndrome, CNS vasculitis, COL4A1 brain small-vessel disease.
References
