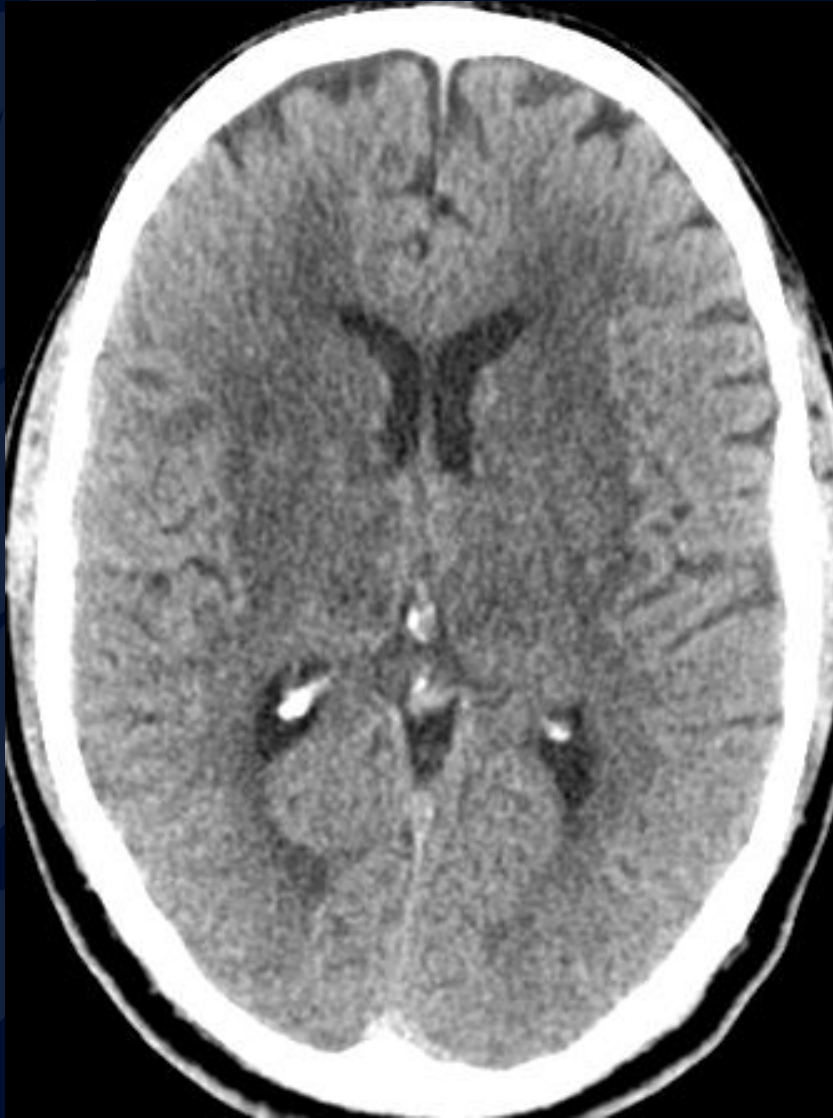


# H/O Migraines with Aura & Cognitive Impairment

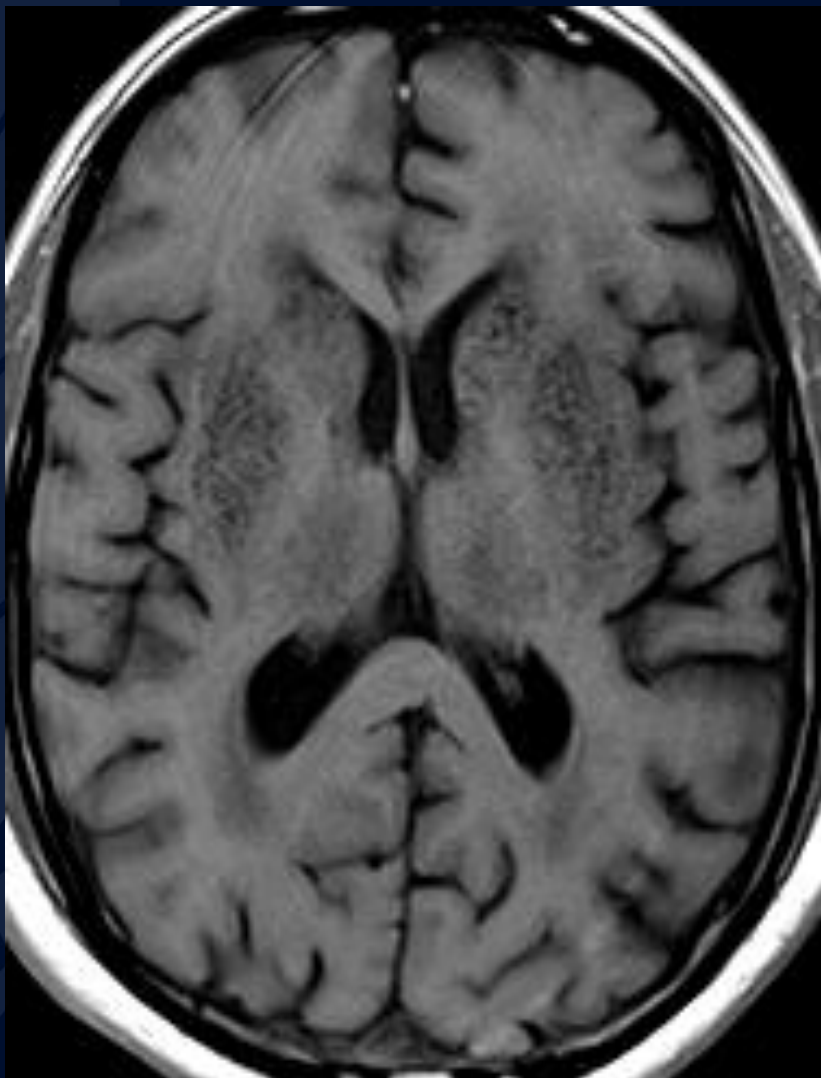
Syed Daniyal Asad, MD

Nerea Lopetegui-Lia, MD

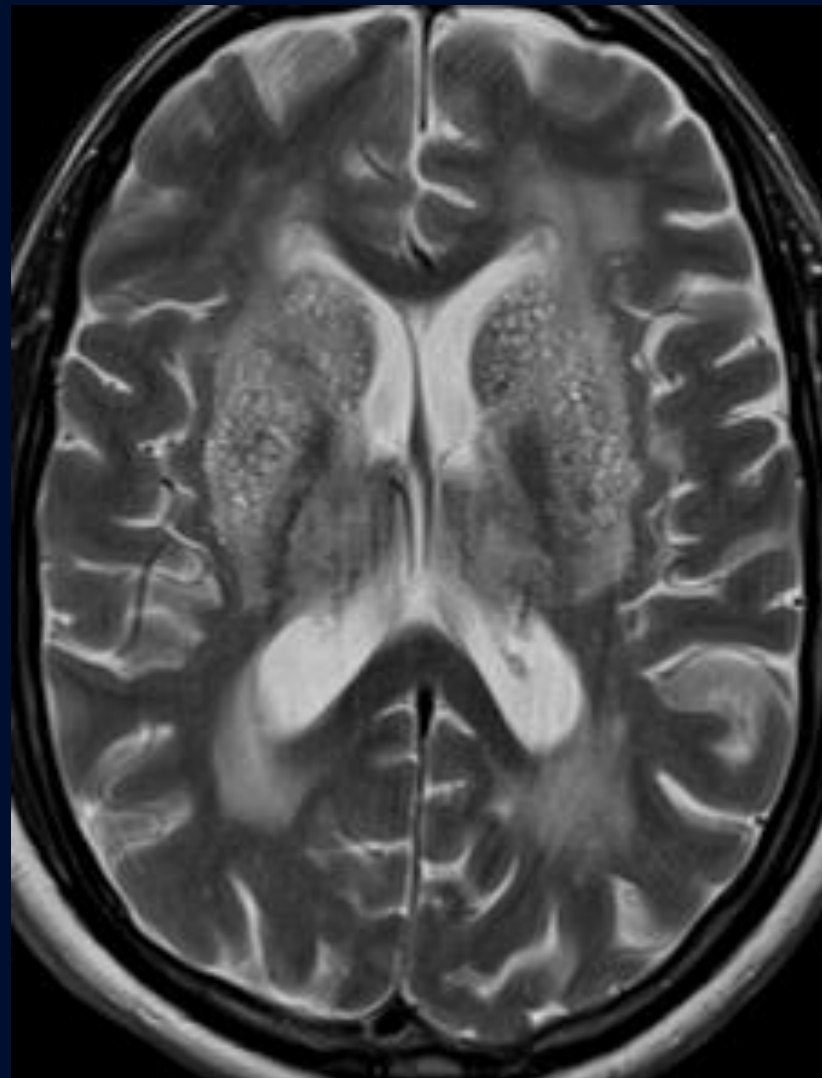
Leo Wolansky, MD



C- CT

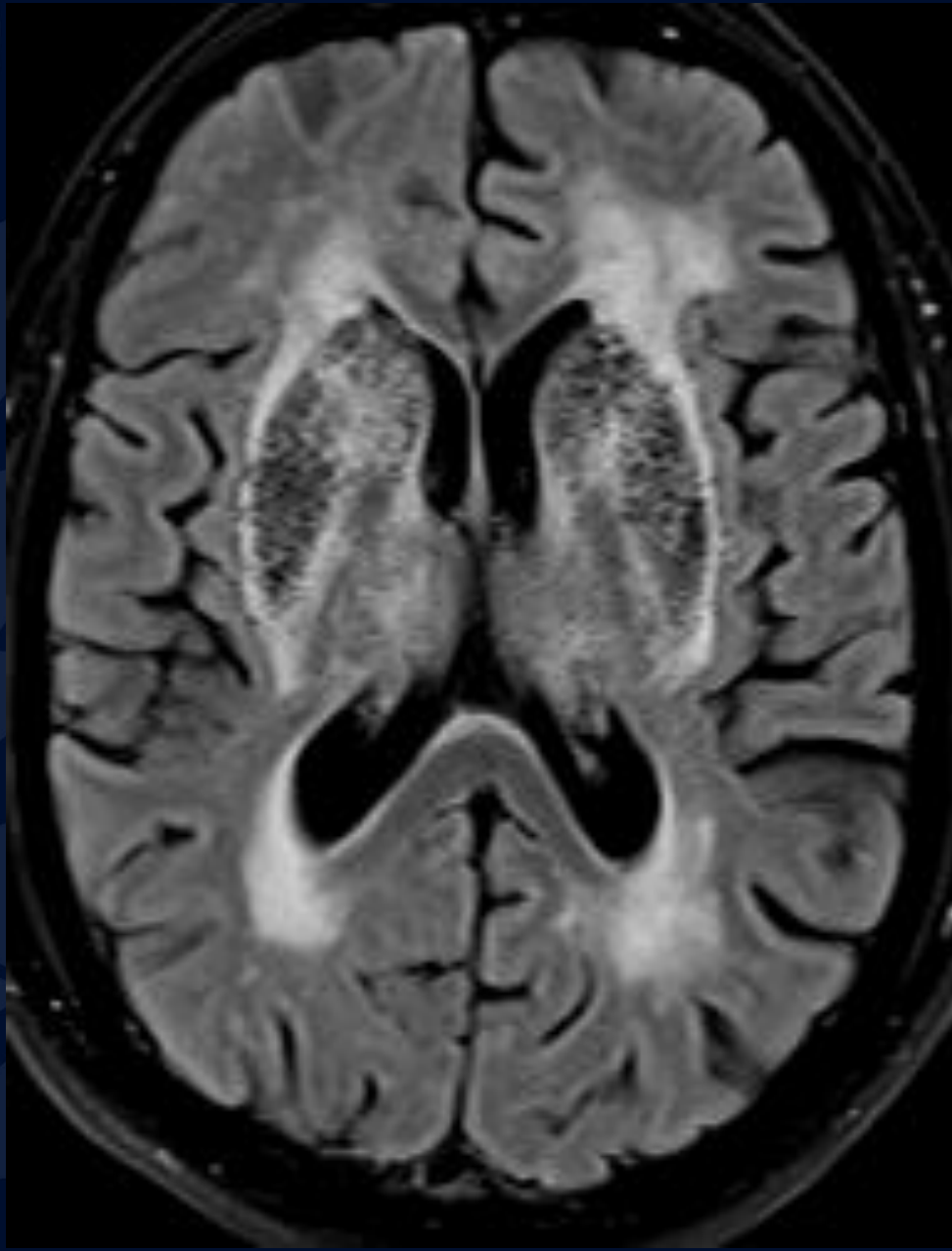


T1



T2

# T2 FLAIR

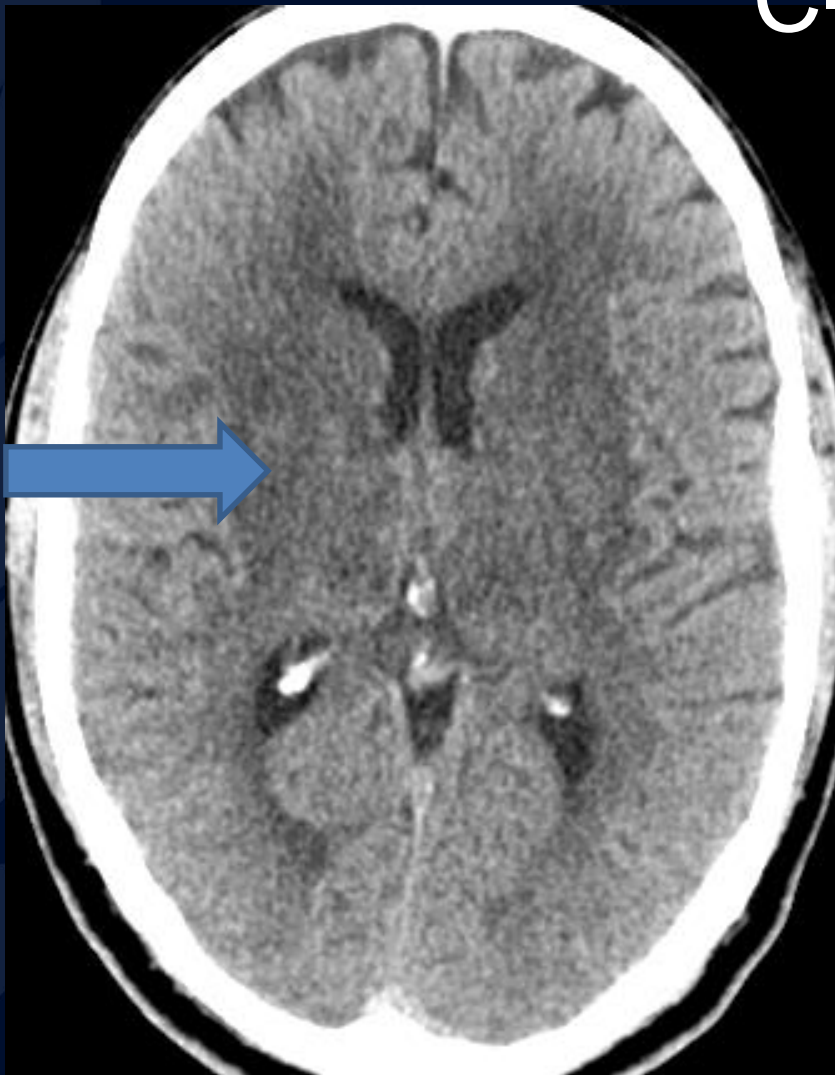


A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off. The background is a solid dark blue.

?

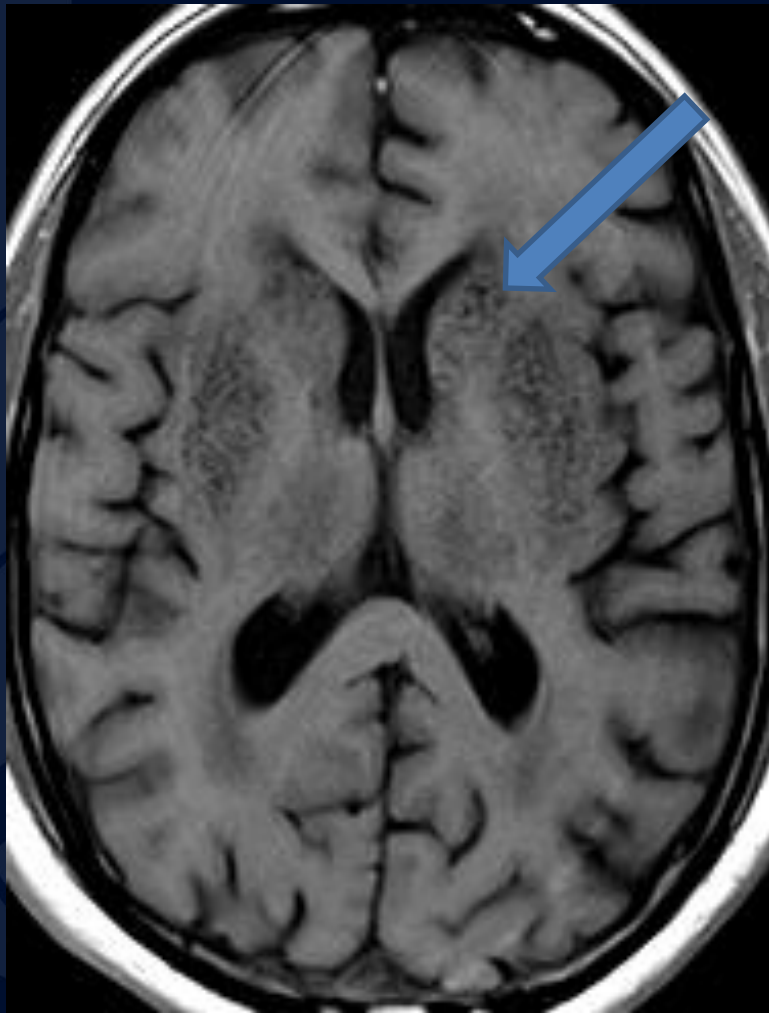
# Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL)

# C-CT

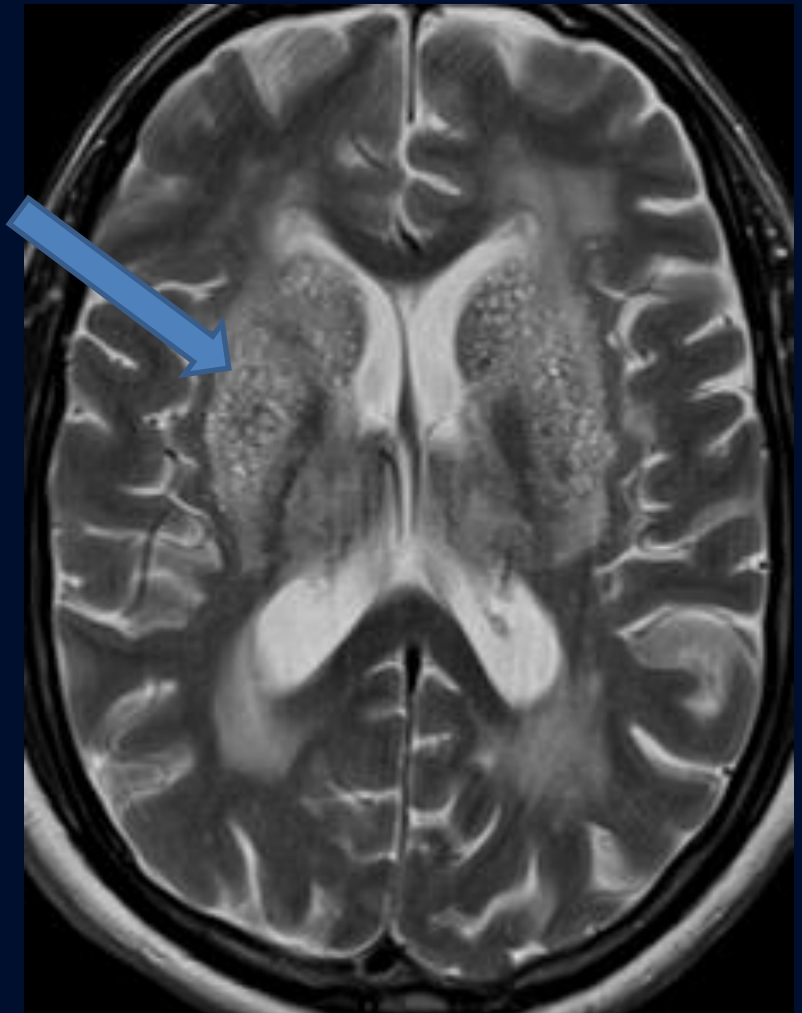


Diffuse hypodensity (arrow)

T1



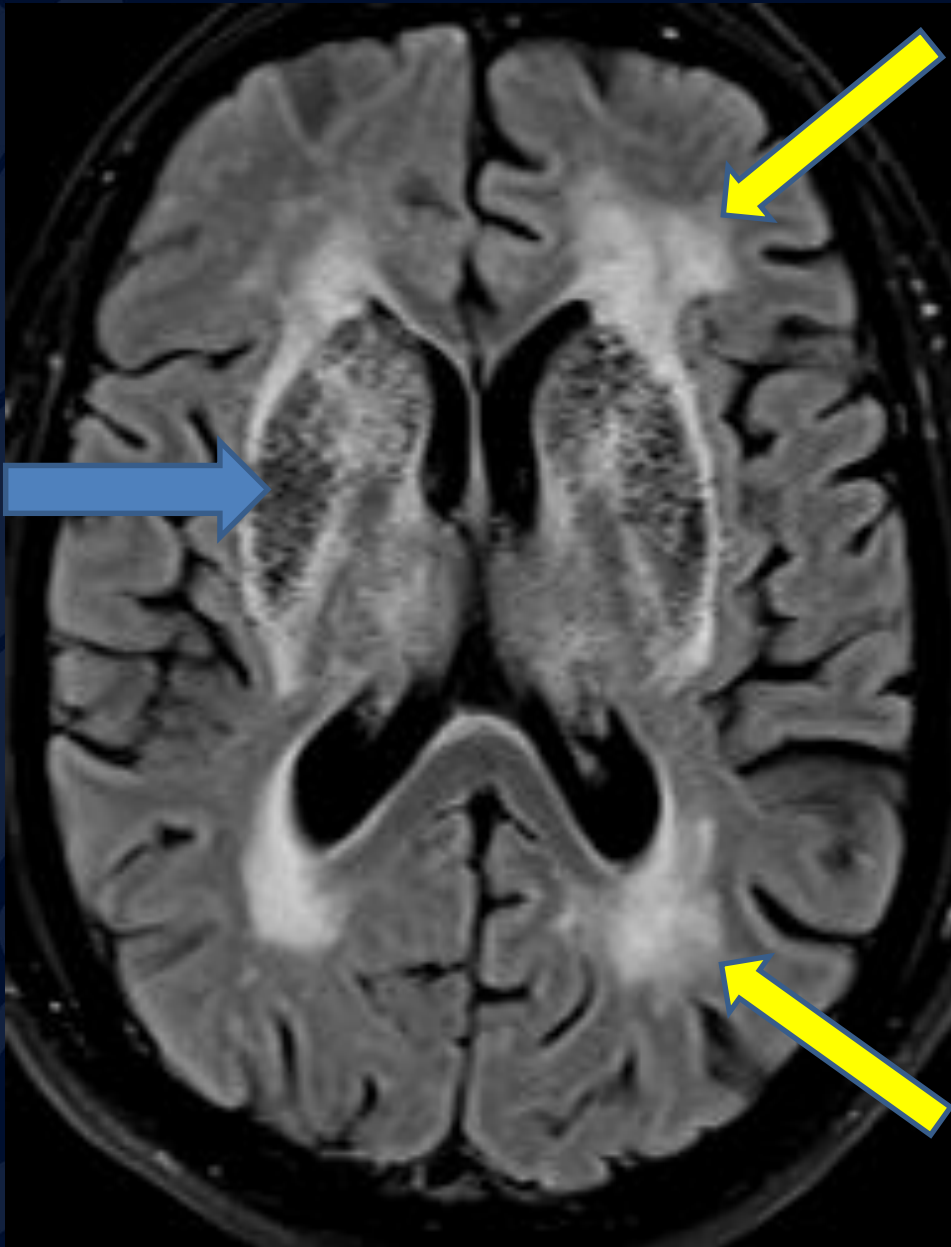
T2



Increased soft tissue contrast of MRI demonstrates the countless dilated perivascular spaces: “état criblé” (blue arrows) with intermixed chronic lacunar infarcts



# T2 FLAIR



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

van den Boom R, Lesnick Oberstein S, van den Berg-Huysmans A, Ferrari M, van Buchem M, Haan J. Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy: Structural MR Imaging Changes and Apolipoprotein E Genotype. American Journal of Neuroradiology February 2006, 27 (2) 359-362

Chabriat H, Joutel A, Dichgans M, Tournier-Lasserre E, Boussier M. CADASIL. Lancet Neurol 2009; 8: 643-53