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Neuro *Images*

Leukoaraiosis three-dimensional in Binswanger disease

Carlos Valencia, MD, Joan Martí-Fàbregas, MD, Jesús Pujol Nuez, MD, Josep-Lluis Martí-Vilalta, MD, Barcelona, Spain

An 81-year-old man had been hypertensive for years. Three years before this evaluation, he had a stroke and brain imaging showed a left putaminal infarct. During the last 2 years his gait, cognitive abilities, and behavior have gradually deteriorated. On examination, he walked with slow shuffling steps. His Mini-Mental State Examination score was 22. MRI showed severe white matter abnormalities characteristic of Binswanger disease. The white matter abnormalities (leukoaraiosis) in Binswanger disease are most likely caused by chronic ischemia. The most common clinical presentation consists of slowed thinking, walking, and behavior in an elder individual with hypertension.

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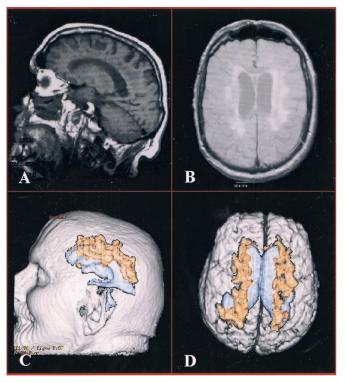


Figure. (A) On T1-weighted MRI, the white matter abnormalities are not well shown. Proton density images (B) show prominent white matter hyperintensities. C and D are three-dimensional images that show white matter lesions (light brown) located predominantly in the frontal and parietal lobes adjacent to the lateral ventricles.



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