

Evidence Discussion Dementia (HD 8.1)

EviCore
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- The primary role of neuroimaging in the work up of patients diagnosed with dementia is to exclude other serious differential diagnosis such as tumors, subdural hematomas, and normal pressure hydrocephalus.¹ The American Academy of Neurology (AAN) recommends the use of noncontrast CT or Brain MRI for aiding in the diagnosis of dementia. Cross sectional imaging may also identify characteristic brain atrophy patterns found in common neurodegenerative diseases and vascular insults. CT imaging may also be used when MRI scans are contraindicated.
- Volumetric MRI brain for the diagnosis of dementia is not currently recommended for routine clinical use by the AAN.^{1,2} There remains a significant evidence gap in the literature regarding clinical validation of volumetric MRI in the diagnosis of dementia.^{2,3} Their use remains limited to research studies.

References

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3. Pemberton HG, Zaki LAM, Goodkin O, et al. Technical and clinical validation of commercial automated volumetric MRI tools for dementia diagnosis-a systematic review [published correction appears in *Neuroradiology*. 2021 Sep 24;:]. *Neuroradiology*. 2021;63(11):1773-1789. doi:10.1007/s00234-021-02746-3