

Dementia Impaired Mental Function	Goroll & Mulley	Eisenberg	Kasper	Gomella	Paulman	Total	Collected Cases
Alzheimer's disease	x	x	x	x	x	5	2
Multiinfarct dementia	x	x	x	x	x	5	7
Creutzfeldt-Jakob disease	x	x	x	x		4	
HIV infection/AIDS encephalopathy	x	x	x	x		4	
Parkinson's disease	x		x	x	x	4	1
Pick's disease		x	x	x	x	4	1
Dementia with Lewy Bodies	x		x		x	3	
Repetitive trauma (e.g., boxers)		x	x	x		3	
Brain tumor		x	x			2	2
Chronic CNS infection		x	x			2	
Huntington's disease	x		x			2	
Intracranial tumor	x		x			2	
Multiple sclerosis	x			x		2	
Normal pressure hydrocephalus	x	x				2	2
Progressive supranuclear palsy	x		x			2	
Subdural hematoma		x		x		2	3
Alcoholism			x	x		2	
Drugs			x	x		2	
Vitamin deficiency			x	x		2	
Neurosyphilis	x					1	
Wernicke-Korsakoff syndrome		x				1	
Wilson's disease	x					1	
Shy-Drager syndrome			x			1	
CADASIL ¹			x			1	
Senile dementia				x		1	

¹ Cerebral Autosomal Dominant Arteriopathy, Subcortical Infarcts, and Leukoencephalopathy

CAUSES OF DEMENTIA WITH CT AND MRI FINDINGS

Cause	CT	MRI
Alzheimer's disease	Cerebral atrophy (esp. temporal lobe)	Cerebral atrophy (esp. temporal lobe)
Multiinfarct dementia	Multifocal low density foci +/- cerebral atrophy	Multifocal T1/T2 prolongation foci +/- cerebral atrophy
Creutzfeldt-Jakob disease	Normal or diffuse atrophy	DWI+ followed by T2+ cerebral cortex, basal ganglia, thalamus
HIV infection/AIDS encephalopathy	Diffuse cerebral atrophy	Diffuse cerebral atrophy; T2+ basal ganglia
Parkinson's disease	Normal or diffuse atrophy	Normal or diffuse atrophy; decreased substantia nigra size
Pick's disease	Severe frontal and mild temporal lobe cerebral atrophy	Severe frontal and mild temporal lobe cerebral atrophy
Dementia with Lewy Bodies	Atrophy	Brainstem, substantia nigra, and cortical atrophy
Repetitive trauma (e.g., boxers)	Diffuse cerebral atrophy	Diffuse cerebral atrophy
Brain tumor	Mass	Mass
Chronic CNS infection	Brain swelling	Brain swelling; abnormal enhancement
Huntington's disease		
Multiple sclerosis	Multifocal white matter lesions; diffuse atrophy	Multifocal white matter lesions; diffuse atrophy
Normal pressure hydrocephalus	Disproportionate distension of lateral ventricles versus sulci	Disproportionate distension of lateral ventricles versus sulci
Progressive supra-nuclear palsy; multisystem atrophy; Shy-Drager	Midbrain and collicular atrophy	Midbrain and collicular atrophy; periaqueductal abnormal signal, increased putaminal iron
Subdural hematoma	Extra-axial crescent	Extra-axial crescent
Alcoholism	Diffuse atrophy, esp cerebellum	Diffuse atrophy, esp cerebellum
Drugs	None	None
Neurosyphilis	Cerebral infarctions; nonspecific white matter lesions	Cerebral infarctions; nonspecific white matter lesions
Wernicke-Korsakoff syndrome (thiamine deficiency esp in EtOH)	Normal	T2+ mamillary bodies, medial thalami, tectal plate, periaqueductal area; C+ same areas
Wilson's disease	Hypodensities in the basal ganglia and thalami	T1+, T2+, CE in the basal ganglia and thalami
CADASIL (cerebral autosomal dominant arteriopathy with infarcts and leukoencephalopathy)	Findings of infarcts and extensive white matter disease	Findings of infarcts and extensive white matter disease; FLAIR-subcortical nuclei

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