

# Quick Reference

FOR GERIATRIC PSYCHIATRY

*The tables in this section are drawn with permission from Spar JE, La Rue A: Concise Guide to Geriatric Psychiatry, 3rd ed. Washington, DC, American Psychiatric Publishing, 2003.*

Table 1. Areas to Consider in a Sleep Assessment Interview

Nature of the complaint: what the problem is and when it occurs (e.g., sleep onset, sleep maintenance, early-morning wake up, daytime fatigue, nightmares)

Current sleep-wake schedule

History of sleep complaint (transient disturbance vs. long-standing complaint)

Symptoms of sleep disorders that may not be initially volunteered (e.g., restless legs, periodic limb movements, narcolepsy, gastroesophageal reflux, parasomnias, disruption of sleep-wake schedule)

Symptoms of sleep-disordered breathing (disturbed breathing at night, complaints of snoring, headache on waking, partner sleeps in another room)

Daytime states, routines, activities (sleepiness, fatigue, functioning, mood, activities, satisfaction with daily routines)

Naps, frequency, time of day, length

Sleep hygiene (daytime activity, exercise, sleep environment, activity in bed, diet, use of stimulants/depressants)

History of professional treatment of the sleep complaint and a review of what the client has tried to remedy the sleep problem

Medical/physical problems

Use of prescription and nonprescription drugs

Psychiatric history and mental status review (symptoms of depression, anxiety, thought disorder, other psychological maladjustment)

Stressful circumstances (currently and when sleep problems began)

Information regarding antecedents, consequences, secondary gains, precipitating factors, perpetuating factors

*Source:* Adapted from Trevorrow T: Assessing Sleep Functioning in Older Adults. In Handbook of Assessment in Clinical Gerontology. Edited by Lichtenberg P. New York, Wiley, 1999, pp 331–350. Copyright © 1999 John Wiley & Sons, Inc. Reprinted by permission of John Wiley & Sons, Inc.

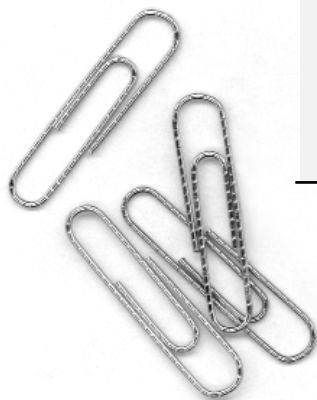


Table 2. Primary Aging: Changes in Anatomy and Function of Major Organ Systems

System	Anatomical Changes With Age	Functional Changes With Age
Cardiovascular		
Heart	Decreased size, flexibility of collagen matrix; lipofuscin and fat deposition in myocardium; fatty infiltration and calcification of aortic and mitral valves	Impaired left ventricular diastolic filling, reduced $\beta$ -adrenergic (i.e., chronotropic and inotropic) response to catecholamines, leading to decreased peak exercise cardiac index and ejection fraction
Arteries	Redistribution and molecular rearrangement (cross-linking) of elastin and collagen in arterial walls; calcification	Increased systolic blood pressure
Respiratory		
Lungs	Enlarged alveolar ducts and alveoli; loss of elasticity	Reduced ventilatory capacity, especially during exercise
Musculoskeletal	Increased chest wall and joint rigidity; increased kyphosis; degeneration and calcification of cartilage	Same as above
Gastrointestinal	Some loss of smooth muscle cells of intestine; atrophy of gastric mucosa; increase in gastric pH; some loss of hepatocytes; reduction in hepatic blood flow	Reduced eliminatory efficiency: constipation; reduced metabolism of drugs
Genitourinary	Loss of renal mass, loss of glomeruli, thickening of basement membrane of glomeruli and tubules, development of tubular diverticula, intimal thickening of arteries, development of afferent-efferent shunts in juxtamedullary glomeruli and obliteration of arterioles in cortical glomeruli; reduced bladder elasticity, especially in women; prostate enlargement in men	Reduced glomerular filtration rate and renal plasma flow; loss of bladder emptying capacity
Endocrinologic	Atrophy and fibrosis; loss of vascularity; changes may be very minimal	General decline in secretory rate, but resting hormone blood levels may remain constant as clearance also declines
Nervous	Loss of brain weight and volume in most studies; loss of neurons, depending on brain area studied; loss of dendritic arbor with reduced interneuronal connectivity; interneuronal accumulation of lipofuscin and loss of organelles; neurofibrillary degeneration of neurons; accumulation of senile plaques, especially in hippocampus, amygdala, and frontal cortex	Inconsistent evidence of reduced blood flow; reduced metabolism of glucose and oxygen; intellectual changes
Musculoskeletal	Reduced muscle and bone mass; demineralization of bone; increased fat in muscles and calcium in cartilage; degeneration of cartilage; loss of elasticity in joints	Loss of muscular strength and stamina
Immunologic	Involution of thymus, reduction of the proportion of naïve T cells, increased proportion of activated/memory T cells, decreased expression of IL-2 receptors, decreased cellular proliferative response to T-cell receptor stimulation	Increased susceptibility to cancer
Special senses	Yellowing of lens in eye	Loss of auditory and visual acuity, especially night vision

Table 3. Differentiating the Common Dementias

Type	History	Physical Findings	Cognitive and Behavioral Function	Imaging/Laboratory Findings
Alzheimer's disease	Gradual onset and progression; $\pm$ family history	Typically none until mid/late stages	Language deficits early (word finding, anomia, fluent aphasia); clues not helpful with retrieval; visuospatial deficits early	Cortical atrophy, ventricular enlargement on CT, MRI; temporal/parietal hypometabolism on PET; hypoperfusion on SPECT
Vascular dementia	Abrupt onset, stepwise decline; history of hypertension, atherosclerosis	Neurologic signs and symptoms (e.g., gait abnormalities, falls, incontinence)	Patchy impairment; depression, relative preservation of personality common	Stroke; lacunae in basal ganglia, white matter; periventricular lesions very common, required for diagnosis if focal neurologic signs absent
HIV dementia	HIV-positive blood test; gradual onset of cognitive changes	Neurologic signs and symptoms may be present (e.g., ataxia, tremor, frontal release signs)	Forgetfulness, apathy, slowness, poor concentration common	Elevated CSF protein; mild lymphocytosis may be present; neuroimaging nonspecific; HIV usually present in CSF
Head trauma	Head injury	Depends on location of injury; dysarthria, hemiparesis common	Memory impairment usually present; impulse dyscontrol, irritability, personality change may be seen; nonprogressive unless head trauma repeated (e.g., in dementia pugilistica)	Depends on location, extent of injury
Parkinson's disease	Dementia in later stages of neurologic syndrome	Extrapyramidal signs (e.g., tremor, gait disturbance, rigidity, bradykinesia)	Cognitive slowing, poor recall, frontal signs (e.g., perseveration, decreased word list generation, impaired behavioral sequencing); clues helpful with memory retrieval	Subcortical atrophy on CT (e.g., increased intercaudate distance, ventricular enlargement) common; global cerebral metabolism also may be diminished on PET

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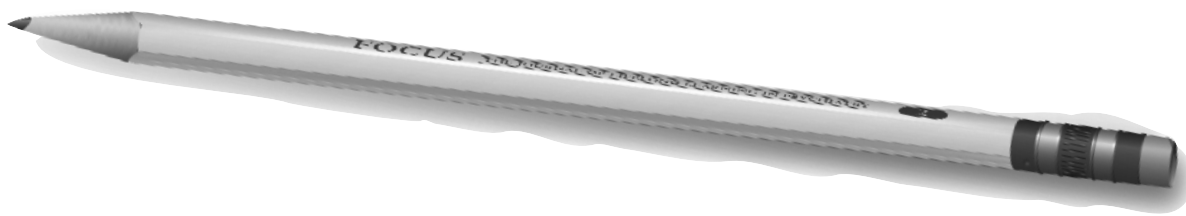


Table 3. Differentiating the Common Dementias (Continued)

Type	History	Physical Findings	Cognitive and Behavioral Function	Imaging/Laboratory Findings
Huntington's disease	Autosomal dominant pattern of inheritance; onset generally in 30s–40s; offspring of affected parent 50% likely to be affected	"Fidgeting" progressing to choreoathetosis	Personality change, loss of judgment, irritability early, memory impairment later; psychosis common	CT or MRI may show striatal atrophy; PET may show striatal hypometabolism
Pick's disease	Onset in 50s–60s	Frontal release signs (e.g., snout, grasp reflex) common	Personality change, emotional blunting, deterioration of social skills, language deficits early; memory impairment, dyspraxia later	CT or MRI may show frontal and temporal atrophy; PET may show frontal hypometabolism
Creutzfeldt-Jakob disease	Onset in 40s–60s; 5%–15% have family history; rapid progression (i.e., 1-year course) typical; can be transmitted by corneal transplant or contact with infected brain tissue or CSF	Myoclonus early, seizures later; ataxia, visual symptoms, gait disturbance variably present	Nonspecific symptoms (e.g., fatigue, diminished sleep and appetite early; global cognitive deficits late)	CT and MRI may be normal; EEG may show sharp, triphasic synchronous discharges at 0.5–2 Hz

*Note:* CSF=cerebrospinal fluid; CT=computed tomography; EEG=electroencephalogram; HIV=human immunodeficiency virus; MRI=magnetic resonance imaging; PET=positron emission tomography; SPECT=single photon emission computed tomography

Table 4. Screening Laboratory Tests for Evaluation of Depression in the Elderly

Test	Potential Diagnosis
Complete blood count with differential white cell count	Folate deficiency anemia, viral infection
Serum thyroid-stimulating hormone, thyroxine, serum cortisol (A.M. and P.M.)	Hypothyroidism and hyperthyroidism; hypoadrenocorticalism and hyperadrenocorticalism
Sequential multiple analysis of 18 chemical constituents of blood (SMA-18)	Hypercalcemia, hypokalemia, hyperglycemia
Urinalysis, blood urea nitrogen	Uremia
Computed tomography or magnetic resonance imaging of head (as indicated by results of above tests, physical examination)	Brain tumor, stroke