Algorithm Guiding the Differential Diagnosis of Dementia

Memory complaint or other decline in cognitive function

History
  Functional evaluation
  Psychiatric assessment
  Mental status exam
  Neurological/physical exam
  Caregiver assessment

Meets criteria for dementia?
  Yes
  Cause of dementia apparent?
    Yes
    Patients with a history of trauma, anoxic insult or other definite cause of their dementia (e.g., Huntington’s disease, Parkinson’s disease), if stable, require no further diagnostic assessment
    No
    Laboratory tests abnormal; medical illness present?
      Yes
      Specific diagnosis: hypothyroidism, B12 deficiency, syphilis, systematic illness, human immunodeficiency virus (HIV) encephalopathy, etc.
      No
      Neuroimaging indicated and abnormal?
        Yes
        Tumor, abscess, hydrocephalus, subdural hematoma, multiple sclerosis, stroke/vascular dementia
        No
        Motor system disorder present?
          Yes
          Extrapyramidal syndromes: progressive supranuclear palsy, Lewy body dementia, other movement disorders with dementia
          No
          Evidence of depression syndrome present?
            Yes
            Dementia syndrome of depression
            No
            Alzheimer’s disease
              Memory, language and visuospatial disturbances; indifference, delusions, agitation
            Frontotemporal dementia
              Marked personality changes; relative preservation of visuospatial skills; executive dysfunction
            Lewy body dementia
              Marked visual hallucinations, delusions, fluctuating mental status, neuroleptic sensitivity