Differentiating Delirium, Dementia, and Depression

Patients and their families often attribute a cognitive or functional mental decline to age. Progressive cognitive decline is not a normal age-related change. Dementia is usually subtle in its onset and may not be recognized until it has affected one or more cognitive domains. Clinicians often meet patients in moments of health crisis and it is vital to distinguish between dementia, delirium, and depression particularly amongst the elderly, whether it be in the office or acute-care setting.

Dementia

Signs and Symptoms
Dementia is the most common disorder of cognition, and is characterized by a decline in one or more of these cognitive domains (Larson, 2017):

- Memory (remote memories versus recent memories)
- Language (finding of words)
- Learning new skills (following linear instructions, with ability to repeat skills)
- Executive function (ability to shop, do laundry, write a check)
- Complex attention (completing multi-step tasks)
- Social cognition (remembering family connections, names)
- Perceptual-motor skills (dressing, bathing)

The decline in function must not be attributable to other organic disease, must not be due to an episode of delirium, and must be severe enough to interfere with independence or daily functioning.

Dementia Syndromes
While the majority (60-80%) of cases of dementia are related to Alzheimer Disease (AD), other major dementia syndromes include (Larson, 2017):

- Dementia with Lewy bodies (DLB)
- Frontotemporal dementia (FTD)
- Vascular (multi-infarct) dementia (VaD)
- Parkinson disease with dementia (PDD)

Less common syndromes that may present with dementia are:

- Alcohol-related dementia
- Progressive supranuclear palsy (PSP)
- Huntington disease
- Creutzfeldt-Jakob disease

Frequently, dementia has more than one cause or contributing factor and the elderly may also be suffering from other medical illnesses or comorbidities that exacerbate the course and progression of their dementia.
Clinical Presentation
The subtleties of dementia may be difficult to detect during routine clinical practice, and the best assessments come from family or caregivers involved with the daily life of the patient. Family or caregivers will offer clinicians a glimpse into the patient’s historical baseline and current state of cognitive function related to:
- How the patient is able to retain new information
- Behavior and how patient manages new situations
- Patient language skills, such as finding words
- Orientation to place and spatial abilities, such as getting lost in familiar places
- Reasoning skills and how unexpected events are managed by patient

Delirium
In stark contrast to the insidious and gradual onset of dementia, delirium is an acute change often associated with confusion or a clouding of the senses (Larson, 2017) and should be considered a medical emergency. Delirium is a complex neuropsychiatric syndrome which tends to develop over a period of hours or days and may fluctuate throughout the course of a day (Paulo et al., 2017).

Signs and symptoms may include:
- Inability to focus, sustain attention, or shift attention between tasks
- Hypervigilance
- Agitation and restlessness
- Tremulousness
- Hallucinations (visual, auditory, tactile)
- Somnolence, decreased mental status, hypoactivity

Delirium may be precipitated by (Francis, 2014):
- Side effects of medication, or interactions of medications
- Intoxication with prescribed medication due to accumulated doses
- Infections, such as sepsis, pneumonia, or urinary tract infections
- Dehydration
- Electrolyte imbalances, including hypoglycemia
- Metabolic disturbances including hypoxemia and hypercarbia
- Sleep disturbances, insomnia due to hospitalization
- Immobilization, altered care setting, lack of usual assistive devices for mobilization
- Sensory impairment, not having glasses or hearing aids available

Treatment and Management
Avoiding delirium in the elderly is the best approach, and this includes avoiding factors known to precipitate episodes, such as polypharmacy and dehydration.
When delirium is present, the primary objective is to identify the instigating factor and provide definitive treatment. While caring for the patient with acute delirium, non-pharmacologic measures offer the safest care options allowing the primary cause time to resolve. Providing a supportive and restorative setting, with respect for hours of sleep, limiting sensory overload, and creating a home-like setting are known to decrease the incidence and duration of delirium in the highest risk patients (Francis, 2014).

Nonpharmacologic Interventions
- Altering patient environment, decreasing ambient noise, improving lighting.
- Providing frequent reassurance through touch and verbal reorientation.
- Using familiar staff or family to reassure and observe patient.
- Neither endorsing nor challenging hallucinations or delusions.

It is recommended that physical restraints are avoided, as they contribute to poor physical outcomes (aspiration, lost mobility, pressure ulcers), prolonged duration of delirium, and are not proven to be effective (Francis, 2014).

When appropriate and necessary, prescribers are urged to use the lowest dose possible of the shortest acting pharmacologic agent to allow the non-pharmacologic treatments to be successful in easing the bout of delirium.

Depression
Depression can present as a confounding factor when examining elderly patients suffering from cognitive decline. Elderly patients with depression will often be able to self-report that they are experiencing memory problems, and may make weak attempts to perform cognitive exams, stating “I just can’t do this” (Larson, 2017). Depression may affect anyone, and the elderly are no exception. Those with baseline dementia may also suffer from depression, and it is therefore recommended that clinicians screen for depression in the elderly, as it is a treatable/reversible comorbid condition that can contribute to dementia and cognitive decline.

Signs and symptoms may include:
- Decreased concentration or attention span
- Impaired judgement
- Self-reported memory loss
- Feelings of hopelessness, often worse in morning

Depressive Syndromes
- Pathologic grief reactions (loss of spouse)
- Major or minor depression
- Dysthymic disorder
Special Considerations

The family or caregivers of those suffering with dementia may also need support, particularly during an acute illness or a combined bout of delirium. Seeing a loved one in acute delirium may leave caregivers feeling frustrated, frightened, and depleted. Consider that delirium may need weeks or months to resolve fully, and this will require care to continue in other less acute settings. Communication with family, care team, and anticipated long-term care facilities should include details about the patient’s mental status and cognitive needs.

<table>
<thead>
<tr>
<th>Comparing delirium and dementia (Larson, 2017)</th>
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<tbody>
<tr>
<td>Delirium</td>
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<tr>
<td><strong>Onset</strong></td>
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<tr>
<td>Acute, with decline presenting over hours or days, where mental status may fluctuate</td>
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<tr>
<td><strong>Speech</strong></td>
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<tr>
<td>Disordered thoughts, may be incoherent, garbled</td>
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<tr>
<td><strong>Prognosis</strong></td>
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<tr>
<td>Reversible</td>
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<tr>
<td><strong>Attention</strong></td>
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<tr>
<td>Impaired, unable to maintain focus</td>
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<tr>
<td><strong>Memory</strong></td>
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<tr>
<td>Variable, may fluctuate</td>
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<tr>
<td><strong>Duration</strong></td>
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<td>May take weeks or months to fully resolve</td>
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</tbody>
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References:

